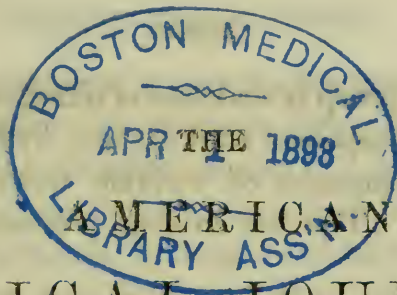


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BLOOD.

Ultimate analysis of the human body reveals that oxygen, hydrogen, nitrogen, chlorine, and fluorine; carbon, sulphur, phosphorus, and silicium; potassium, sodium, calcium, and magnesium; and iron and manganese, are its component elements. Into albumen, fibrin, globulin, cellulose, and myolin, enter oxygen, hydrogen, carbon, nitrogen, sulphur, and phosphorus. Into hæmatin enter the first four, and iron. These bodies—albumen, fibrin, globulin, hæmatin, myolin, and cellulose, have been, in prior articles, examined. But they do not embrace half of the primary elements of the body. Other compounds must appear in the blood, containing manganese, magnesium, calcium, sodium, silicium, fluorine, and chlorine, for the blood is the pabulum of the body, and contains all that is in any tissue.

Fat, water, soda, potassa, lime, magnesia, salt, silica, manganese, and fluorine, their combinations, and those compounds from disintegration which are passing from the tissues into the blood-vessels, for farther metamorphosis, and elimination; also the starch, gum and alcohol, that may appear in the blood, remain for examination.

The fat of the blood is one of its most important compounds. It is an indispensable element in every form of nutrition, and plays a conspicuous part in calorification. Fat and albumen are ever in the animal world found in association.

The oleaginous group is destitute of nitrogen, but in some instances contains phosphorus with carbon, hydrogen and oxygen. Animal fats are composed of variable quantities of margarin, stearin, and olein. The fats in man predominate in margarin, and olein.

These are solvable in ether and hot alcohol, but not in water, nor cold alcohol. Oily substances are considered saponifiable, or non-saponifiable, as they are, or are not, decomposed by strong alkalis. When the fat is saponifiable, the alkali decomposes it, separating it into a fatty acid, and a fatty base; for the former, the alkali has the stronger affinity, making a soap; the base is left free. Fatty acids are separated from their bases by other means than by strong alkalis; they are forced from each other by ferments—by putrescent albumen. And it is not impossible in low grades of disease—when there is a degradation of the blood, that the abundance of the thin existing putrescent element may in the body decompose the fat of the blood.

The fatty acids developed by the process of saponification, are margarinic, stearic, and oleic; and the base that is set free is glycerine. The base is common to each acid, while the acids all differ from each other. The formula of margarinic acid is $C^{34}.H^{32}.O^3.W^1$. That of oleic acid is $C^{36}.H^{33}.O^3.W^1$. And that of stearic acid is $C^{63}.H^{66}.O^5.W^2$. By these analyses it will be seen that two equivalents of margarinic acid minus one of oxygen, will make stearic acid. The formula of glycerine is $C^4.H^7.O^5$. By some the true base is called oxyde of lipyl, whose formula is $C^3.H^2.O^1$. Supposing that at the time of saponification, two equivalents of lipyl unite with three of water making glycerine.

Dr. Quain has shown that the muscular and other tissues, when placed in very dilute nitric acid, or diluted spirit, will be metamorphosed into a substance exactly resembling fat. And we may by this explain those retrogradations of the higher tissues into fatty in the old, and those affected with obesity.

M. Bernard has pointed out the fact that the blood of the hepatic vein ordinarily contains more fat than the portal vein. Also when the animal had been fed on substances containing no fat, and none could be detected in the portal vein, it was found in the hepatic. The inference that forces itself upon us is from the

above facts, that the liver possesses the power of creating fat. The acid of the butyric acid group—capric, caproic, butyric, and butyroleic, have been generated during the decomposition of albumen. Tissues of the living body change into adipose matter. Adipocere is a soap formed by a union of fatty acids and ammoniacal or calcareous base, which is formed in the dead body; or it may be by macerating a piece of muscle in water. A body was exhumed at Bristol, retaining much of the plumpness of life, but on examination was found to be completely saponified. Blandeau discovered that the casein of cheese undergoes a gradual change into fat. From these facts we infer that under certain circumstances the tissues may be degraded into fat, that the whole body may become adipocere; that if fat is deficient in the blood, that the liver can form it out of gum, or starch, or sugar and water; also out of the products of waste in the blood, out of gelatin, chondrin, and albumen.

Fat is one of the most important elements of combustion. In the capillaries it meets with the oxygen from the air; they unite, form water and carbonic acid, and set free caloric. This process—calorification is of vast importance; every action in the body depends upon this; increase or decrease from the standard of health, and disease is the consequence; ninety-eight degrees of heat to the body is a *sine qua non*. The preservation of this degree is the mortal enemy of scrofula and tubercle; while it lasts they can make no progress. No process is more faulty in consumption than calorification.

Fat cells abound in the areolar tissue. In some they are very active and abundant. They merely attract the fat from the blood, and deposit it in their cavities. It is retained until demanded by the blood, and then passes back into the circulation. Fat is one of the components of all cells; with phosphorus it is found in the nervous centres; it passes the substantia alba of the veins, and is the symmetrical element of the body.

Water— $O^1.H^1$. is the most abundant, universal, and necessary compound of the body. We will not be far from the truth in stating that water forms 75 per cent of blood and flesh. So important is water to life that the ancients looked upon it as life itself. It holds an intermediate rank between air and food, being

less essential than the first, but more so than the last. That in the vessel is obtained from drink, from air in the shape of vapor, and from the direct union in the body of hydrogen and oxygen. It is lost by evaporation at the lungs, there being a membrane of 144 square feet which is at every inspiration exposed to a new current of air; by evaporation at the external surface—containing 2,500 square inches continually exposed to the atmosphere; by a rapid transudation at the Malpighian tufts of the kidneys; by nutrition, by secretion; by effusion into the areolar tissue; by chemical union with other elements in the formation of new compounds, and by actual decomposition. It is the vehicle of all solids, in canals, receptacles, ducts and vessels. It is the solvent of gums, sugar, salt, acids, alkalies, neutrals, and most secretions. It is the body's universal cleanser, externally and internally. Most of the excretions it will dissolve. It can be drawn out of the vessels with great ease and rapidity, loaded with its digested excrement. At the same time it can be given to the vessels in its purity as fast, and as easily as it can be drawn away, burdened with noxious products of waste. Thus does it present to the practitioner one of the most effectual modes of medication—of purification. Catharsis, and diuresis by cream of tartar, and podophyllin, commenced mildly, and pushed perseveringly, followed with small and repeated doses of pure water, will wash the man internally as effectually, as a bath and soap will externally. It is already digested; it will be no tax to the stomach; it will pass at once into the blood vessel, into every vessel, into the entire areolar tissue, not a nook nor recess that it will not discover and bathe, and then back into the vessel, and out at the kidneys and bowels, with its burden of dissolved stale matter. It at once, by its refrigerating power, can reduce any dynamic state of the system. Not a sthenic state that it cannot immediately change to the normal tone and heat.

SODA— $\text{Na}^1.\text{O}^1$. is not as such a necessary element of the food, but its elements—sodium and oxygen, must be in the food. It is found in the blood in union with phosphoric acid, carbonic acid, and sulphuric acid; it is found in the bile uncombined; the phosphate occurs in alvine excretions, in sweat and urine. This soda thus free and in combination, is obtained from the salt of

food and oxygen of the breath. The chloride of the sodium is decomposed by the system, and a union follows between the sodium and oxygen, the latter being always present, and the alkali is the result. Soda is found in combination with the albumen of saliva, and is always in healthy blood associated with albumen. The amount of it is $1\frac{1}{2}$ per cent. It is united to albumen as an acid is to its base, and gives to the albumen a basic property. Pure albumen is insoluble in water, but soda-albumen is readily soluble in water. The offices of soda in the blood are to render the albumen thereof soluble by the serum, to prevent the coagulation of albumen, to prevent the fibrillation of fibrin, to fit the blood so it will pass with ease through the capillaries, to be secreted by the liver, giving the bile an alkaline reaction, so that when the chyme acidified by lactic and hydro-chloric acids, and slightly degenerated by the ferment—ptyalin, meets the bile in the duodenum, it may neutralize the acid and stop the farther action of pepsin, otherwise the ferment and acids will decompose the albumen of chyme, and give rise to inorganic compounds, and they to pain, flatulence, and diarrhœa. It is serviceable in neutralizing the acids of disintegration in the nervous and muscular tissues. This process is continually evolving sulphuric, phosphoric, and carbonic acids, the first two are caustics, and the last is a narcotic, and they are instantly rendered inert by the alkalinity of the blood, by the union with soda and other bases.

The phosphate of soda, and the carbonate, thus formed, are received from the seats of their formation, into the vessels, and mingle with the blood, not altogether as stale elements for elimination by the excretory organs, though if they become excessive they are thus removed, but are coupled with the blood for a great service. These elements of the blood do not wholly come from the wastes of the nervous and muscular tissues, but in all probability are formed also from simples in the serum and red cells.

The phosphate of soda, aided perhaps by the carbonate of soda, gives to the serum of the blood double the power over water to absorb oxygen and carbonic acid. Also it gives to the red cells their remarkable power to absorb oxygen from the air, and carbonic acid at the capillaries. The exportation of this gas from the tissues, and the importation of oxygen from the air, are de-

pendent upon an alkalinity of the blood, produced by phosphate of soda. This being so, the philosophy of its administration, in small quantities, in scrofula, tuberoses, aplastic states of the blood, and prostration of the nervous and muscular system, can be easily understood. Vegetable acids—malic, citric, tartaric, and tannic, are rapidly metamorphosed by the blood, aided by phosphate and carbonate of soda, otherwise they are eliminated by the kidneys, as they were received by the stomach. Uric acid which is a product of waste is also farther reduced—decomposed by those alkalis, and gives rise to urea and oxalic acid. The more alkali the blood contains, the more difficult it is for albumen to coagulate, or fibrin to organize. Perhaps this fact may be serviceable in adhesive inflammations. We can see here why the alkaline bath is valuable in stenic diseases. On the basic state of the blood, depends the power of the blood to dissolve the oxides of iron, manganese, calcium, and magnesium. The free alkali greatly favors the combustion of organic compounds—sugar, lactin, glucose, and lactic acid. Any deviation from the physiological standard, of the amount of alkali in the blood, above or below, must greatly interfere with the functions of life. If the blood loses its alkalinity—if it becomes neutral, or acid, the incoming of oxygen, and the out-going of carbonic acid, will be reduced at least one half; albumen and other organic compounds will be less soluble; fibrin will organize more readily; fluids will pass the capillaries with increased difficulty; the acid products of waste will not be neutralized; the organic acids will pass through the system unaltered; the organic combustible elements will resist the process of calorification; bile will lose its power to neutralize the chyme, and the albuminous group will be disintegrated before it reaches the blood; the metallic oxides will not be dissolved, and much of the retro-gradation of the first products of waste will be retarded; they will accumulate, and great derangements will follow.

POTASSA— K^1O^1 . appears in the blood as a nutriment. Potassium is found in large quantities in the red cell, and so is oxygen; it is also found in the serum, but not in so large amounts. The ashes of muscles yield 40 per cent, of potash, and 14 per cent, of the chloride of potassium. Salts of potash appear in urine,

in fæces, and in sweat. It is an important element of the muscular fibre. And when this tissue is hypertrophied, food destitute of potash would be indicated; but when this tissue is atrophied, then potash would be required.

LIME— $\text{Ca}^1.\text{O}^1.$, combined with phosphoric acid, forms 52 per cent of the elements of bone, 66 per cent of dentine, and 89 per cent of enamel. Bones that are softening are faulty in this “bone earth;” food destitute of phosphate of lime, will cause softening of bones. The ash of cartilage contains 4 per cent of this earthy salt; muscular fibre contains 1 per cent; it is supposed to be a necessary accompaniment of the protein compounds; it is found in all animal fluids; the protein compounds are supposed to be its solvent; it is found with every cell of the body—hence in every tissue; it is considered as necessary to the organic formative power as any element; so much so that it has become a favorite remedy in all aplastic states of the blood. It should be considered as one of the necessary elements of nutrition in every tissue, as much so as water, or albumen, or air, but not in the same amounts. Carbonate of lime forms 8 per cent of bone, 3 per cent of dentine, and 4 per cent of enamel. In that degradation of the tissues known as ossification, food containing the salts of lime, or lime will be advantageously discarded; but when the reverse happens, the softening of the bony tissue, food containing the “bone earth” will be beneficial, and also when the processes of assimilation, sanguification, and nutrition are embarrassed in tubercle and cachexy, this earthy salt will be indicated.

MAGNESIA— $\text{Mg}^1.\text{O}^1.$, in combination with phosphoric acid, appears in the blood en route for the bones, which contain 1 or 2 per cent; dentine contains 1, and enamel 1. It is also detected in the urine and fæces.

CHLORIDE OF SODIUM— $\text{Na}^1.\text{Cl}^1.$, is received with the food and found as a constant element of the blood. The ashes of muscles contain 14 per cent of salt. One per cent of chlorine occurs in the red cells, and 3 and over appear in the liquor sanguinis. Chloride of potassium, and chloride of sodium are detected in perspiration; chloride of sodium is one of the elements of urine; and it is also found in fæces. When received by the blood, it is decomposed, its chlorine unites with hydrogen, and

appears in the gastric guice as hydro-chloric acid, as a solvent of the protein compounds of food; the sodium joins the oxygen of the blood, and appears in bile as soda, for the neutralization of the acids, from the stomach, and for the cessation of the action of pepsin. The chlorine also unites with potassium for the formation of an aliment for the muscular tissue. The soda which is in union with albumen fitting it for solution by the water of the blood, also that which forms salts with phosphoric and carbonic acids, is in all probability obtained from the sodium of salt, and oxygen of the air. And lastly salt is the great conservator of the blood; it is the blood's universal anti-septic. Fermentation and putrefaction are ever ready to raise their rebellious and mutinous voices in the very penetralia of the body. Ferments are there doing with their might the retro-grading work. To keep this process within certain limits—to keep it under the jurisdiction of life, and to prevent the rich albumen, fibrin, globulin, and hematin from degradation, to preserve them in all their vigor and plasticity, is the function of the chloride of sodium. In the dynamic states of the system this wonderful preserver may not be needed. But in all adynamic conditions, in all malignant, typhoid, fermenting, putrefactive states, then salt is called for, then introduce the conservator of the blood and tissues, and prevent the domination of retro-gradation. When the physician remembers that common salt is necessary for the formation of gastric juice, for the construction of bile, for the solution of the organic compounds of the blood, for the alkalinity of the blood, for the making of the phosphates and carbonates of soda, which give to the blood its remarkable ability to absorb oxygen and carbonic acid, for the formation of chloride of potassium which is necessary for the nourishment of the muscular tissue, and for an anti-septic to the whole blood and tissues, then its use in practice will be clearly understood.

SILICA— $\text{Si}^1.\text{O}^3.$, occurs in the blood as one of the elements, necessary for the nutrition of the hair. It is also found in the excrement of the eliminating organs. Its use farther than this has not been noticed.

MANGANESE, one of the heavy metals, as an oxide has been noticed in the analysis of bone. Traces of it appear in the products of eliminating organs.

FLUORINE, one of the natural gases in association with oxygen and calcium enters into the formation of bone, and also shows itself in the excretions. S.

(TO BE CONTINUED.)

MEDICINE A NATURAL SCIENCE.

Medicine is as much a natural science as Philosophy, Chemistry or Geology. While man is the heir of pain and disease, he is, by a munificent providence furnished on the other hand with means for his relief, and these means have been found (in proportion as the science of medicine has been developed) to be so perfect in their adaptation, and this adaptation is so perfectly correspondent to the other laws of nature, as to preclude all doubt as to their being fixed in the order of nature.

We are not left here alone to reason *a priori*, to clear this point, but every fact gathered from professional experience, and every deduction upon reasoning from these facts prove the same.

Physiology and Pathology form the basis of the practical superstructure of medicine. As Physiology teaches the laws of organic life, or the *science of life*, Pathology contemplates these laws in their deranged, obstructed, or imperfect state. Medicine proposes to restore the physiological laws from their pathological state. Now, if in all efforts to be made in the maintenance of the physiological state, or of the restoration of this state from that of the pathogenetic or diseased state, we are left to the caprice of mere art we must fail; but this is not the case. The conservative power of the system—the *vis medicatrix naturae*—involves all the conditions of cure, and our artificial appliances are successful or unsuccessful, just as they are or are not adapted to the *natural indications of cure*.

If then disease consists simply of the interruption of the physiological laws, if then also the cure depends upon the display of

the conservative and healing power, either aided or not aided by extrinsic curative agencies, is not the truth irresistible that medicine is a natural science?

But an objector may say that altho' the basis or the principles upon which the science of medicine is predicated may be of *natural character*, yet that superstructure, that classification, that arrangement of the several facts involved, so as to present the theory of medicine in a tangible form to the mind, is certainly altogether *artificial* and incidental, and as this work—this arrangement—is what is usually referred to when medicine is spoken of as a science, is it not proper to call this science a speculative and hypothetical science?

The answer here is most obvious. No one of the natural sciences are clear of imposed or obtruded speculations and of hypothesis. The human mind is prone to speculation, and hypothetical reasoning, and will carry these into all the avenues of thought. Hence it follows that when we would designate the character of any science, we fix our attention upon the fundamental principles and doctrines upon which it is predicated, and we look at the explanatory and incidental glosses, and the foreign material supplied in the superstructure, in a *critical light*, and our conclusions rest entirely upon the character of the fundamental principles and essential elements of the superstructure.

Medicine must in this light be denominated strictly a *natural science*.

As a *natural science* medicine is a *perfect science*, and there is therefore always a true standard to govern the practitioner. The office of the physician is thus clearly indicated. The acts and appliances that may be thus invoked as means auxiliary and strictly consistent with the inherent vital conservative and restorative powers must be instituted and practiced with discrimination, so that all the natural indications are fulfilled, and no other rule of action must ever be admitted by the physician.

Another fact is pertinent to this view of the science of medicine, then it must agree in its correlatives—it must correspond with all the other natural sciences, as we find all the laws of nature in the strictest harmony. All the remedial appliances must be harmonious in all their bearing in reference to any and all the na-

tural laws. The vital laws, that is the laws of animal life, must not be infringed by our appliances—we *must in no case employ poisons*, or such agents as are intrinsically inimical to life, and we must avoid all circumstantial poisons, that is, we must guard against all such circumstances as would produce mischief from agents otherwise harmless. This doctrine is the more admissible from the fact that the new views in medicine propose a system of remedial appliances so abundant, and of a variety so complete as to afford ample means to fulfil every natural indication, with the greatest promptitude, convenience, certainty, and safety—*natural remedies for natural wants.* J. K.

HOOPING-COUGH, OR PERTUSSIS.

Hooping-cough, is one of those troublesome maladies, to which infancy and childhood are liable, though not so fatal as either pneumonia or croup.

It is found to prevail, most frequently in young children, and oftener in girls than boys. It occurs both in the sporadic form, (that is, *not* confined to some locality,) and in the widely prevailing epidemic, extending over a vast extent of country. It is not only contagious, but can be transmitted by actual contact, in consequence of which, it is infectious.

Hooping-cough is characterized by a hard, convulsive cough, which takes place during expiration, and is accompanied by long shrill, laborious inspirations, which have given rise to the term hoop, as applied to this peculiar kind of cough. The cough comes on in paroxysms, which sometimes continue for several minutes, and terminate by the expectoration of a tough phlegm, and not unfrequently by vomiting.

In simple uncomplicated cases there is seldom any fever, the appetite continues good, and with the exception of occasional languor, fatigue, and irritability of temper, the child appears to be well, and spends its time in play, during the intermissions, as if nothing was the matter.

Hooping cough has been regarded by the profession as a disease of self-limitation, which may be modified, but not arrest-

ed in its course. This is the prevailing opinion of our day, though it is well to remark, that there are a few who advocate quite an opposite doctrine; that is, that it can be cut short. And it is to be hoped for humanity's sake, that this latter opinion entertained by the few, will become popular with the profession, based as it is to be hoped on sound pathology, and the therapeutic action of the agents used in its treatment.

PATHOLOGY.—The treatment of this disease, as well as all others, mainly depends on the correctness of the views entertained of the pathological condition of the parts involved. If our views be correct, it is not a very difficult matter to select suitable remedial agents to fulfil the indications. If incorrect, as is sometimes the case, our treatment is uncertain and empirical.

What then is the essential anatomical lesion in pertussis as laid down by the standard authorities? A writer of distinction says, "there is no anatomical lesion, except, perhaps, slight inflammation of the bronchial mucous membrane." In many cases, the membrane lining the small air-tubes, and sometimes that of the trachea, is thicker than natural, and somewhat reddened, and the tubes contain a larger quantity of frothy mucus, or a thick viscid, and tenacious phlegm.

The same writer says, that the disease ought to be regarded as comprising two elements of morbid action, one of which consists in slight inflammation, but partakes of the character of both.

For the treatment, we have quite a variety of remedies, each one having its advocates who claim for it a superiority over all others. There are but a few agents, however, that have been of much value in our hands. Belladonna is a valuable agent and a favourite remedy with many; but on account of the extract, which is most always used, varying in strength, sometimes at most inert, at others again of full strength; it becomes a dangerous agent to use if prescribed, as is the custom in towns and cities, first getting the prescription filled at one store, then at another, the results must necessarily vary according to the strength of the medicine. It requires, also, more care in its administration, and attention to the symptoms; of its action on the patient, than we generally find among those having charge of small children.

The following formula will be found convenient to administer and effectual, if the extract be good.

R. Ext. Belladonna - . - gr.x.
 Alcohol - - - - - gtt.x.
 Water - - - - - ʒj.—Mix.

Let the extract be thoroughly dissolved, and the compound well shaken before using it. The dose for a child from four to six months old should be from five to ten drops, once in two hours, and continued till the pupils become dilated, and a red rash appears on the skin, after which no more should be given, that day. The morning following, commenced with the same quantity, and continued till the same effect is produced as before. Should this quantity not be sufficient to produce the dilatation of the pupils, or the red rash on the skin, then each dose may be increased two or three drops, till it does. In a few days, the cough will be perceptibly diminished. Many cases are recorded as having been cured in from five days to a week.

Another remedy of great value, and less dangerous than Belladonna, is the *carbonate of potassa*, which in the form of cochineal mixture, is not confined to the profession, but is used as a domestic medicine, and with very satisfactory results. The following formula is the one generally used:

R. Carbonate of Potassa - - ʒj.
 Cochineal - - - - - ʒss.
 White Sugar - - - - - ʒj.
 Water - - - - - ʒiv.—Mix.

To a child, one year old, give a dessert-spoonful, once in four hours, during the day.

I have frequently used this remedy, and am fully persuaded, that with the exception of alum and nitric acid, it is not only safe to use, but is one of the most useful medicines in keeping down the violence of the disease, with which I am acquainted. The carbonate of potassa may be used alone, dissolved in simple syrup, or gum and water, and in much larger quantity than as recommended above.

Alum has been highly extolled by Dr. Golding Bird in his reports of Guy's Hospital. He thinks it is most potent administered when "all inflammatory symptoms have subsided, and

when, with a cool skin and clean tongue, the little patient is harassed by a copious secretion from the bronchi, the attempt to get rid of which produces the exhausting and characteristic cough, alum will be found to be of much value." It may be said with truth, that there are but few if any agents, which act with more certainty, or afford such marked and rapid relief to the little sufferers as the one under consideration.

It may be administered freely without fear of any serious consequences supervening. If administered in large doses, it produces vomiting, which is not objectionable in the least. Neither does it constipate but on the contrary, is apt to bring about a loose condition of the bowels, when continued for long time. The quantity recommended to be given varies from two to six grains every four hours.

The formula which Dr. Bird recommends is as follows.

R. Aluminis	- - - - -	gr.xxv.
Ext. Conii	- - - - -	gr.xij.
Syrup of Red Poppy	- - - - -	3ij.
Aqua Anethi	- - - - -	3iij.—Mix.

Of this, a teaspoonful may be given every three hours, to a child from two to five years of age. A much larger quantity is recommended by Dr. Bird.

A formula, which I use and prefer to the above, on account of its ease, is as follows:

R. Alum - - - - - ʒij.

Syrup of Ginger, Syrup acacia, Aqua Fontis a a 3j.—Mix.

"When this is prepared with good syrups," says Dr. Meigs, it tastes very much like lemonade," in consequence of which, it is not at all disagreeable or unpleasant to the taste, so that children take it without trouble, and in some cases become very fond of it. The dose is a teaspoonful four times a day, or every four hours.

The acid treatment has recently been very highly spoken of by Dr. Gibb, of London, and numerous writers of our own country. It is claimed for nitric acid, that it as successfully arrests the paroxysms, and removes the hooping, and shortens the disease, as quinine does an attack of intermittent fever. Others contend, though it may not fulfil the indications in every case, it is, nevertheless the best remedy yet presented to the profession. The acid may

be combined in various ways to suit the prescriber, or the palate of the patient. I have used it during the last three months, in a number of cases, combined as follows:

R. Nitric acid diluted - - - 3ss.

Simple syrup, Water aa - 3.ij—Mix.

Of this, a teaspoonful, every two hours, to an infant under twelve months. To a child over that age, the dose must be proportionately increased.

T. J. W.

DIAGNOSIS BETWEEN SCARLATINA AND MEASLES.

It may be assumed, and correctly too, that Scarlatina cannot be distinguished from other eruptive fevers, prior to the appearance of the eruption, with any degree of certainty. The only symptoms of a diagnostic character, at this early period, are great frequency of pulse, which is apparent at an early day, more or less soreness of the fauces, accompanied with a redness of the mucous membrane, and a knowledge of the disease prevailing at the time. These symptoms are all, however, uncertain and fallacious, and he who wishes to speak with certainty, ought to wait for the appearance of the eruption, before he ventures an opinion. The appearance of the eruption settles the question beyond doubt, as it cannot well be mistaken for anything else.

Scarlatina may be distinguished from measles by the following symptoms:—

SCARLATINA.

The forming stage of Scarlatina rarely lasts more than twenty four hours, and frequently not so long.

In scarlatina the rash appears suddenly, and frequently arises at its height in a single day.

In scarlatina the eruption is in the form of innumerable small dots, or points, which are in such

MEASLES.

The forming stage of Measles seldom, if ever, less than four days.

In Measles the rash appears first on the face, and extends by degrees, until it invests the entire body, but seldom reaching the hands and feet before the termination of the second day.

In Measles the eruption appears first in distinct papula, which unite and form patches of an ir

close contact as to give to the surface a uniform color, compared to that produced by blushing.

The color of the eruption in scarlatina is of a bright scarlet tint.

In scarlatina the throat is deeply involved.

In scarlatina the febrile symptoms run very high, the pulse is very frequent, attended with a dry, hot skin. The pulse frequently runs as high as 140 to 160, in young children.

regular, crescentic shape.

The color of the eruption in measles is dark red, like raspberry juice.

In measles the throat is but slightly, if at all, affected.

In measles the fever never runs as high as in scarlatina, the pulse less frequent, and the skin not so hot.

T. J. W.

It will be one of the constant objects of the Journal to secure and bring before the Profession the Experience of liberal and independent physicians. Improved, convenient, and successful modes of treatment are urgently solicited. The Practitioner will ever find the columns of the Journal open to him. In fact it will be the Physician's Journal. Every one demands a simple, convenient, neat and reliable Practice; and in this way can such a Practice be obtained, in a brief presentation of the practice of practical men.

Editorial.

TO THE PATRONS OF DR. POTTER'S JOURNAL.

A few statements of fact by the faculty of the A. M. College, in relation to the American Medical and Surgical Journal, are deemed proper.

Dr. Potter was editor and proprietor of this Journal, when published at Syracuse, and while published at Cincinnati. When Dr. P. accepted the Chair of Theory and Practice in the A. M. College, the Faculty took a lively interest in its pages, and in its patronage. They wrote for it zealously, and labored cordially for the extension of its subscriptions, in view of which they have reason to believe that many subscribers were secured for the Journal in the South and North West. But the Journal has not appeared since February, months have elapsed since its last issue; only two numbers of the volume for 1856 have been issued. From its patrons come the interrogatory—"Has the Journal been suspended?" Its friends are dissatisfied. In many instances they hold the Faculty responsible for its publication, and its cessation under the circumstances, has a tendency to injure the College.

Because friends to the College have been induced to subscribe for the Journal by the Faculty, because in some instances the Faculty are supposed to be responsible for the publication of the Journal, though in truth they have had nothing to do with the business of it, because a wound to the College is likely to be inflicted by its suspension, because of a pressing demand from the 262 students of the College, because of a loud call from the friends of the College for a bold, independent, and tolerant Medical Journal, and because the highest good of the College demands it, the Faculty will publish a monthly periodical, to be called the American Medical Journal.

To all who paid the subscription price to the A. M. & S. Journal, for 1856, through the influence of the Faculty, the A. M. Journal will be sent for one year without charge. Others, whose confidence in the stability of the Journal the Faculty were in nowise the cause of, cannot expect such a gratuity.

The publication of the Journal is wholly, at the start, at the expense of the Faculty. They have coalesced for the establishment and success of the A. M. College; and now they come forward and publish the A. M. Journal to avoid misunderstanding, to prevent

alienation of feeling among their friends, to convince the Profession that the Faculty of the A. M. College are reliable, are in earnest, are honorable, are devoted to a solid Reformation in practical medicine, are true to the confidence placed in them by their past classes, and are doing all in their power to meet the expectations of the great number of students who have already signified their intention to attend the coming course of lectures in the American Medical College.

The American Medical Journal will be sent to the patrons of Dr. Potter's Journal, and on the receipt of it, those who subscribed for his Journal because of its publication at Cincinnati, and connection with the A. M. College, will so inform the Dean, Dr. T. J. Wright, No. 8, George St., Cincinnati, Ohio, the A. M. Journal will be sent to such for one year free of charge.

The American Medical Journal will also be sent to a large portion of the friends of Young Physic throughout the States and the Provinces for examination, patronage, and recommendation. As far as it may be practicable for those who receive No. 1 of the A. M. Journal to order the Journal for the year, and to recommend it to their neighbours and friends, the Faculty will aim to more than remunerate by promptness of publication, fidelity to progress, allegiance to science, and devotion to those subjects which are in daily demand by the industrious and philosophical practitioner.

The graduates and students of the A. M. College will receive the Journal. It will come to each of you as to its nearest friend. And if you *all* with ZEAL will labor with the Faculty for one year for its establishment, the expectations of the most sanguine will be fully realized. You are individually requested, earnestly solicited, appealed to by your Alma Mater, to give to the Organ of the College your cordial and liberal support. To the Journal your own dollar is just as good as your neighbor's, and his just as good as yours. Do not then fail to couple them; nor fail to place them in the hands of the Dean, T. J. Wright, at the very earliest practicable date.

To the old pioneers of a practice, the remedies of which combine safety with competency, who are familiar with reverses, obstacles, injury from neglect, mischief from pretended sympathy, also with the benefits from timely aid and true friends, the Faculty look for recommendation, co-operation, and "material" means.

During the month of October next, a Preliminary course will be given in the A. M. College; also, twice a week the Commercial Hospital will be open to the Students of the American.

Two and three lectures in the College per day, and two lectures on Wednesday and on Saturday in the Hospital, free of charge, are opportunities to an enterprising Student of Medicine, worthy of notice and security.

The Dissecting Rooms of the A. M. College will be open to Students during the Preliminary Course. Students wishing to master the Organic Sciences, will find ample opportunity for their prosecution, under the skilful guidance of R. Richard Clay, M. D.

As soon as the receipts of the Journal justify, the size of it will be increased, though the price will remain the same. It is the purpose of the Faculty to make the A. M. Journal the cheapest, the most useful, and the most popular of American Journals. The entire receipts will be devoted to its publication, enlargement, and embellishment.

Vandalism will not constitute the spirit nor the body of the A. M. Journal. It will nevertheless have a determinate purpose. It will be constructive. It will labor with zeal and industry for the establishment of a SATISFACTORY Practice of Medicine, for the perfection of Hygiene, and for the completeness of the Science of Life.

Those who will receive the Journal may be divided into four classes; viz., those who will be entitled to it by the terms of the Faculty; those who will immediately and cordially order it; those who will desire to patronize it, after it has been firmly established, and those who will not favor it at any time.

From all, the Faculty will be much pleased to hear at the earliest possible date. Please to let them know where, what, and how you all are towards the Journal.

Students who wish to tread the quiet and attractive paths of science, freed from the rankness and repulsiveness of partizanism, and the passion, strife, and unscrupulousness of untempered rivalry, will find their wants fully satisfied at the A. M. College.

To the A. M. Journal is open a rich and unoccupied field—the faithful and systematic presentation of the advanced views and practices of the entire Profession. The practitioner and student require a vehicle through which every phase of the Profession can reach them reliable, frank, and faithful manner. Heretofore they have not

had it. Prior to this, domination, illiberality, and exclusiveness have disfigured the various medical periodicals. Now the A. M. Journal steps forward to fill this chasm in medical Journalism, with zeal, courage and confidence. And if it performs this work faithfully, it will soon be the universal favorite of the Profession.

Every student who has attended the A. M. College must be furnished with the Journal. The residences of some of them are unknown to the Faculty; and to obtain a knowledge of the whereabouts of all, will those who do receive it do the Faculty the favor of sending to them the names and residences of all in their knowledge?

Students wishing for something more than a mere routine practice—something more than imitation and blind empiricism, who desire a solid philosophy to guide them in the trying hours of practical life, will find it in the Chairs of Organic Chemistry, Physiology and Pathology of the A. M. College.

Surgical Anatomy and Operative Surgery are presented with great precision, clearness, minuteness, and attractiveness in the A. M. College.

Minute structures, elementary and compound principles, and the forces of nature are heavily taxed, in the Therapeutics of the A. M. College, for the philosophy of the action of Medicines.

No pains will be spared, no prejudice will blind, no fanaticism mislead, nor want of punctuality prevent, the practical chairs of the A. M. College from presenting to the Student the best means and modes of cure known to the Profession.

The friends of a real Progress and a sound Reformation in Medicine are assured that the American is free from heavy rents; is free from the incubus of an accumulating and an uncancelable debt; is free from the mischief of law-suits; is free from an unsettled state of name, home, habitation and charter; is free from a disaffected and incomplete Faculty; is free from contentious spirits, overweening vanity, unscrupulous ambition, and a sordid, tyrannous monopoly; is free from the unprofessional and narrow-minded practice of granting diplomas in science disfigured and disgraced with party epithets; is free from a College professing to teach the noblest sciences, dishonored with rank, clannish and offensive names; and is free from sectarian domination and fanatical antecedents.

No 23839

SEVENTH ANNOUNCEMENT

UNIVERSITY

OF THE

AMERICAN

MEDICAL COLLEGE,

COLLEGE HALL

Walnut, between Fourth and Fifth Streets,

CINCINNATI, OHIO.

Incorporated 1854. Whole number of Students 262.

FACULTY.

F. M. KING, M. D., Professor of Theory and Practice of Medicine
R. C. CARTER, M. D., Professor of Obstetrics, and Diseases of
Women and Children.

JACOB SNYDER, M. D., Professor of Medical Surgery, and Medical
Jurisprudence.

JOHN KOST, M. D., Professor of Materia Medica, Therapeutics and
Botany.

J. S. GALLOWAY, M. D., Professor of Chemistry, Pharmacy, and
Toxicology.

T. J. WRIGHT, M. D., Professor of Anatomy and Operative Sur-
gery.

E. H. STOCKWELL, M. D., Professor of Physiology and Pathology.

A. H. POTTER, M. D., Emeritus Professor of Practical Medicine.

R. RICHARD CLAY, M. D., Demonstrator of Anatomy.

ANNOUNCEMENT.

The Trustees of the American Medical College take great pleasure in being able to state to its Alumni, to its friends, and to the Profession that its prospects are very encouraging. The completeness of its organization, and its reputation at home and abroad, are an earnest of its prosperity.

The Chairs vacated by the voluntary resignations of Professors Witt, Cochran and Baldridge (who left in good feeling) have been again filled by men of superior talents and attainments, and who will fully do their part in sustaining the growing reputation of the College.

The Trustees in filling the vacancies in the corps of Teachers, have had in view associative qualities, energy, reliability, permanence, practical experience, and scientific attainments; all of which are conspicuously possessed by each member of the Faculty. There is not a perceptible element of disaffection nor of change in the Institution. Five of the members reside in the city, and the others are so accessible as to enable them faithfully to meet their engagements with the college.

In all ages of the Profession, Medicines have been chargeable with mischief: there have ever been two classes of remedial agents, viz., those that were mischievous only in unskilful hands, and those that were mischievous, whatever the precaution.

The former class, until lately, has been limited in articles and in power, while the latter has been potent and numerous. But recently the safe agents have been greatly augmented in qualities, efficiency, and numbers, so much so, that in resources for the removal of disease, they have far outstripped the unsafe agents.

The fact that the unreliable agents of the *Materia Medica* have been superseded by the reliable ones, lately discovered, is of great importance to the medical student. Besides, it is the most useful and note-worthy achievement of the Profession.

No longer is the scientific physician under the disagreeable necessity of resorting to the use internally, for the removal of disease, of articles which will not submit to control. Their places are more than made good by numerous botanical and chemical accessions to the *Materia Medica* within the last ten years.

There will be a pleasing bias and proclivity in the teachings of the American College towards those agents that are limited to the production of health ; to those articles that will bear control ; to those medicines which foster the physiological state ; to those means that are only equal to the abolition of disease ; to those measures that do not leave behind them pathological foot-marks ; to those remedies that do not in one edge carry a healing balm, and in the other the besom of destruction.

Though the Profession is pervaded with a rank partizan spirit, yet the Faculty of the *American Medical College* will warmly maintain that individual toleration, personal independence, and private judgment are the great pillars of manhood, science and art. The rule is a wholesome one that grants to every member of the Profession that which each claims for himself.

The Institution is centrally located, occupying a suitable portion of College Hall on Walnut Street, between Fourth and Fifth, which is the largest public building in the city. The college apartments comprise a commodious hall for general lectures, amphitheater, laboratory, and ample room for dissections.

The College is provided with complete chemical apparatus, microscope for the prosecution of microscopic anatomy, anatomical and pathological museum, extensive collection of specimens in osteology, and numerous anatomical plates, as large as life. Thus it will be seen that this institution has full and ample facilities which, with an able and practical Board of Instructors, consisting of seven eminent Professors, presents rare attractions to medical students who wish to attend medical lectures.

Ample Hospital privileges are guarantied to the students, and arrangements are made for an abundant supply of anatomical material for dissections thereby furnishing every facility in this highly important branch of medical science.

THEORY AND PRACTICE.—This chair, in the *American College* which is devoted to progressive Medical Reform, is one of the greatest importance ; for it is not merely proposed here to teach Medicine as it is, and as it is taught in the Old regular Colleges ; but granting that medicine, originally brought from a rude state of practice in the use of a few simples, with charms and incantations, has steadily progressed, until it has now taken its position high among the proudest sciences ; yet still a reformation is now needed, and in addition to the rich stores of practical knowledge brought to us, we have something

new to add, and something also to prune away. A scientific practice is here proposed in the use simply of safe remedies. The *heroic* measures and remedies dispensed with, while all the true and natural indications of cure are fulfilled by innocent yet *powerful, prompt, thorough* and *certain* agencies.

DISEASES, their symptoms, cause, duration, termination, diagnosis, prognosis, and treatment will be fully set forth. In this the lecturer will not confine himself to one general plan in his teachings, but will set forth all the respective methods, and indicate that which is to be followed by the philosophical practitioner, and here the distinctive feature is that the course prescribed will be a *safe* one.

ANATOMY AND OPERATIVE SURGERY. The present arrangement has again placed two departments which are so naturally allied and have so often been taught together, into the same hands. A knowledge of structures is the basis of Surgery, and when to this is added the art of Surgical Manipulation the department is complete. The eminent qualifications, and experience of the present incumbent are a sure guarantee for his success. The material for the dissecting room will be abundant, and will be employed from the commencement until the instruction upon the soft parts of the Cadaver are completed; while at the same time the dead subject affords opportunities for Surgical practice in amputations, ligating, cutting as in lithotomy &c.

MATERIA MEDICA, THERPEUTICS, AND BOTANY. Botany has a natural alliance to Materia Medica, and has again been placed in conjunction with this chair. Materia Medica here is in good hands, and will be thoroughly taught. Something more than the mere enumeration of the articles, and the history simply of their physical character, and general medical effects, which have so commonly comprised all taught in the present department in other Colleges, will be given here. Our medical agents will be thoroughly treated in reference to their *natural history, physical appearances and form of occurrence in Commerce*; their thorough *analysis, pharmaceutic character, physiological effects, therapeutic properties, mode and character of operation*; their *equivalents, alternatives and incompatibles*. What is a distinguishing feature of this department in our College is that the instructions upon the medical resources, will not be confined to the class of remedies most cherished by the institution, but the resources of medicine in all the respective systems of practice will receive attention.

Therapeutics may be made of incalculable value to the physician. It comprises the philosophy of the operation of remedies, and forms

the connecting link between the strictly practical and non practical departments of medicine. It comprises more than *a per se* knowledge of the operation of individual remedies. It extends over the entire field of philosophical inquiry upon the laws of cure, whether this be considered in reference to the part performed by the vital or conservative power of the system, or vital susceptibilities and endowments, or whether it concerns the abstract and special affinities and nutritive powers of the remedies themselves, or both these conjoined.

Thus the general and special doctrines in their primary and practical significations will be fully inculcated, and the different principles and speculative theories of therapeutics which lie at the foundation of the various popular systems of medicine as Allopathia, Homoeopathia, Hydropathia, Crono-thermalism, Magnetism, Hygiene, and the effects of Heat, Light, Electricity and Moral influences, as they relate to cure will be thoroughly elucidated. And it is a matter of congratulation that the incumbent of this chair is a man in every way competent for the important station he occupies, being an old teacher, having for years been devoted to this department and organic chemistry, and having written and published various extensive works upon these subjects.

PHYSIOLOGY AND PATHOLOGY.—No department of Medicine is of greater importance than these. They form the ground work of practical medicine, and should ever be thoroughly studied. The world is full of speculations and theories upon the physiological laws, and pathology, and medicine has been like a thing of fancy shifting about upon the various doctrines projected in these departments—now the humoral pathology is popular, now solidism has the ascendancy, and again vitalism, or the chemical theory becomes paramount.

It is therefore a matter of great importance and satisfaction that the American College has a man in this chair, of very superior qualifications, and who has made this department familiar by long and thorough study, and who has also been long a teacher in medicine. This department, presents increased attractions from the rich field of Mental philosophy that has been conjoined to this chair. The present incumbent has been closely engaged in researches in cerebral anatomy and the physiology of the nervous system, and has advanced these departments so as to render a service to medicine which has long been wanted. With these accessions pathology sheds a new light upon practical medicine, by which the therapeutic indications are modified and vastly improved.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.—The advantages of the American College in this department are the practical disclosure of the superior advantages of our mild and congenial remedies. There is a beauty in nature's adaptation to her own wants that can not be too much appreciated, and the world has too many instances to prove the fallacy of forcing the laws of nature into unwonted channels. Professor Carter, brings into this Chair the benefits of a long and fruitful experience in the Reformed practice, which must inspire confidence and insure success.

The department of Diseases of Women and Children, has been too much neglected, and it is hence a matter of congratulation to the trustees of this institution to be able to offer the facilities afforded by a long experience in this department of a man of superior discrimination and judgment, to advance our classes. A very extensive cabinet—by far the best in the city—pathological models in *papier mache*, belongs to this college, that will afford superior advantages to the department of chronic diseases of women and children, as well as other forms of disease.

CHEMISTRY, PHARMACY AND TOXICOLOGY.—The rapid strides of Chemistry in progressive development, especially Organic Chemistry, is procuring for this department increased attractions. Our *Materia Medica* has been much enriched; and not the least advantage obtained is the concentration of the properties of our remedial agents. Great convenience and increased power and promptitude of action has thus been secured. And it is a matter of note here that the American College now comprises in its faculty the men who bestowed the first successful labor for this improvement of the *Materia Medica*.

Chemistry as here taught will unfold the rich mineral stores of nature, and present the engrossing laws of nature in the play of her elementary principles. The atomic laws, affinity, gravitation, cohesion, repulsion, capillary action, polarity, light, heat, magnetism, electricity, and the intensely interesting and important laws of organic action so far as analytical and synthetical inquiry brings them into this department, will be detailed in a masterly way by the very competent hands into which this part of the work has fallen.

MEDICAL SURGERY AND MEDICAL JURISPRUDENCE.—Surgical success has ever been largely dependant upon the medical treatment, that is given in conjunction with the manipulations of operative surgery. With the improvements made in the medical treatment of surgical cases, our profession have advantages which will place the success of practice in our day in happy contrast with that of former times. It is therefore a matter of some importance at the present time, to arrange the several professorships in the College in such a way as to meet the demands, and promote the best interests of the profession at this particular time—to divide the labor in such a way as to afford the greatest possible facilities in medical instruction. Our age in which the sciences are all on the wing of progress, will not admit of a stereotyped method of teaching.

Professor Snider who is one of the new incumbents of our Chairs, also brings with him the advantages of experience and extensive practice, and thus adds still more in that kind of medical knowledge which can only be obtained at the bed-side of the sick, in such a way as to afford the most efficient or useful instruction.

PRACTICAL MEDICINE.—It has been a precedent of honored practice in every age of scholastic training in medicine to keep in collateral association, such men of talents or experience that may be of use to an institution. This precedent is also here adopted, and it is hoped our institution may derive many real practical benefits therefrom.

REQUISITIONS FOR GRADUATION.

1. Three years' regular study of medicine, under the guidance of a reputable practitioner.
2. Attendance upon two full courses of lectures, the last in this Institution.
3. Four years' regular and reputable practice will be received as equivalent to one course of lectures.
4. One course of Dissection.
5. The Candidate should deposit with the Dean a satisfactory Thesis on some medical subject, with the Diploma Fee, on or before the first of January, 1857.
6. The Candidate should be twenty-one years of age, and of good moral character.
7. He must undergo a satisfactory examination by each member of the Faculty, and be approved by the Board of Trustees.

The public Commencement will take place as soon as practicable after the close of the term.

The standard medical authorities are recommended as text books.

Preliminary lectures will commence on Monday, the 6th. day of October next, and continue four weeks; and the regular term of sixteen weeks will open on the first Monday of November.

FEES.

Matriculation Ticket	- - - - -	\$5,00
Tickets for the winter course	- - - - -	\$20,00
Dissecting Ticket	- - - - -	\$5,00
Hospital Ticket (Optional)	- - - - -	\$5,00
Graduation Fee	- - - - -	\$25,00

Boarding and Lodging (including fuel and lights) can be obtained at \$3,00 per week.

Students on arriving in the city, by calling at the College building, on Walnut, between Fourth and Fifth Streets, will be directed to good boarding houses.

Further information may be obtained by addressing the Dean

T. J. WRIGHT, M. D.,
No. 8 George St., Cincinnati, O.

THE
AMERICAN MEDICAL JOURNAL.

VOL. I.

CINCINNATI, O., OCTOBER, 1856.

No. 2.

ESSAY ON MILK SICKNESS.

BY ALFRED MALONE, M. D., OF PALESTINE, ILL.

Delivered before the Medical Class of the "American Medical College," Cincinnati, O., March 25th, 1856.

GENTLEMEN OF THE CLASS:—Circumstances over which I have had no control, make it incumbent upon me to leave you in the midst of our most important investigations. But, being solicited by a member of the Faculty, I shall read you a short Essay, hurriedly written at piece meals, since my arrival in the city, upon the History, Origin, Symptoms and Treatment of the above disease.

1. ITS HISTORY.—So far as my reading is concerned, I can find no particular period in which it was first recognised and registered as a disease. But, on the contrary, even *now*, eminent men in the profession will not acknowledge its existence. On account, therefore, of this want of recognition by almost all medical authorities which I have consulted, I shall not be able to treat the subject very thoroughly, as I have not had, perhaps, more than a dozen patients to treat with this disease.

I have noticed a very meagre account of the disease, in one or two medical journals, and in one or two medical books on Practice. From none of which have I been able to obtain much information respecting the disease. I have just now examined a work by DR. SAM'L H. DICKSON, M. D., L. L. D., upon this subject, in his "Elements of Medicine," which, indeed, upon this point, amounts to but little.

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There are parts of several States in this Union which at times suffer to an alarming extent by the invasion of this disease.

There are those who pretend to give to the disease well marked geological boundaries—I mean that they bound it by geological belts and structures of earth. I am inclined to this position; but it is not my purpose to dilate upon any particular theory of the disease, whether *true* or *false*, but to state *facts* mainly.

So far as my observations have gone, this disease is never known in *prairies*, unless those prairies have branches, creeks or rivulets winding their way through them, and are skirted by a luxuriant growth of timber. Nor is it known, at least so far as I am informed, in a very wet season—neither in a uniform season, when it is neither wet nor dry. In the worst Milk Sick region, when there is a uniform season or wet season, when there is plenty of good green grass for grazing, and plenty of good water to drink, cattle do not have the disease. But if the season is dry, especially in the latter part of the summer and in the fall, when water is scarce, green grazing almost impossible, only upon the skirts of water courses, and in rich low soil, then indeed do cattle fall victims in frightful numbers to this disease.

It is known as “Milk Sickness” from the fact that, generally, the human species take it by using milk and butter from cows having the disease. This, however, is not always the case; for eating the flesh of animals having the disease, will produce it in the human species, in turkeys, turkey-buzzards and dogs. I have known dogs that, after eating of the flesh of animals that died of the disease, could not run at all, nor jump over a fence three rails high. Wild turkeys have been caught without much resistance, and with but little effort; so, also, with regard to the buzzard. These are palpable facts that stand out in its history. It is also called “Trembles,” from the fact that, in beasts that have it, the muscular system does not and can not perform its functions; and hence the trembling. From the milch cow it is communicated to the calf in its worst form; and, when this is the case, the cow is comparatively freed from danger, or from much inconvenience from the disease.

2. ITS ORIGIN OR CAUSE.—Upon this point there are two theories. One contends that the disease is caused by *vegetable* poison. Those filing off under this theory generally regard it as the poison of the *rhus toxicodendron*. The other contends that it is a *mineral* poison,

which arises from the earth and settles upon the herbage in the form of dew, and that it may also be had in certain water. That cattle grazing in its region before the sun has dissipated the dew from the herbage, receive a sufficiency of the poison with their food to produce all the phenomena observed in the disease.

Now, I can not give in to the *first* theory ; *first*, because there are no *known* vegetable poisons, which are capable of producing all the phenomina of the disease ; and, *second*, from the fact that if it were produced by a vegetable poison, the disease would be as likely to obtain among cattle at one season as another, provided it were grazing season. More : if it were of vegetable origin, when vegetation was most luxuriant and inviting, then should the disease more abound. *Facts*, however, stubborn facts, palpably contradict this. All who know anything of the disease, know that the very reverse obtains. It cannot, therefore, be of vegetable origin.

But, we have still stronger facts to negate its vegetable origin. Such experiments as the following have been made : Cattle have been turned into lots perfectly *nude* of vegetation—spots supposed to contain this poison in the earth. All food was cut off from them only such as was fed to them in this inclosure. Now, if the provender was thrown over this earth the overnight, not to be used until morning, when the cattle ate of such provender so prepared, they invariably took the Milk Sick. But if they were only fed there through the day, they could eat with impunity. This experiment, I am told, by good authority, has been tried time and again. Again, large tracts of land where it was believed to exist, have been enclosed for such experiments. Abundance of vegetation grew here. Cattle have been excluded the place of nights, evenings and early mornings, but suffered to roam at large through such place through the day. Under such restrictions they drank and ate with unlimited freedom, and with perfect immunity from the disease. Whereas, if they were only allowed to be within such enclosure through the nights and early of mornings, they uniformly fell victims to the disease. These facts (and facts they are, if confidence can be placed in the asseverations of man,) conclusively prove to my mind not only that it is not of vegetable, but that it is of mineral origin. If the poison was vegetable, such vegetable would produce such disease

uniformly, whether eaten at noonday or at midnight. Such, however, are not the facts in the case. I have not myself experimented in this way; but others have, in whom I can place the utmost confidence—whose testimony is unimpeached and unimpeachable—and this is their unanimous testimony. Such experiments, also, have been had in regard to certain waters, and with about the same results. These facts all combined, certainly negative the idea of its vegetable origin.

But there are other facts, which to my mind go to prove this poison not to be of vegetable origin. The known sequences of the disease, prove by analogical induction that its origin can not be a vegetable poison. It is a recognized fact that, generally, when persons are once thoroughly poisoned by *mercury*, *arsenic*, etc., they never entirely recover therefrom. There are many hundreds and thousands, who would gladly dissent from this proposition, but whose constant aches and pains, sleepless nights and miserable days compel them, sadly against their will, to a *feeling* acknowledgment of the position, so far at least as mercury and arsenic are concerned. When once got into the system there they must remain, to some extent, and in some form, there they must stay. Such, however, is not the case with vegetable poisons, they can be, and are recovered from entirely if the poison is not continued, and if it do not produce immediate death. True, many vegetable poisons will be more likely to destroy life immediately than will the poison we are now contemplating; but once recovered from, if the poison is not frequently after applied, the recovery is complete. Strichnine, opium, and other deadly vegetable poisons, may be taken, not only once, but frequently, but as soon as the poison is pretermitted, if the function of some organ is not entirely destroyed, then will the patient entirely recover from their use.

Mineral poisons, once obtaining a foothold in the system, especially such as mercury, arsenic and some others, never relinquish their claim. I am acquainted with persons who had the Milk Sickness fifteen years ago, and who in warm weather, upon some slight fatigue, still feel its effects. True, a person may have it lightly, be treated thoroughly and recover from it entirely. So, also, may he from mercury, if but slightly touched. I am acquainted with some persons who had this disease some fifteen

or twenty years since, and who now, in warm weather, by a little over exertion, feel its influences sensibly. Such facts are not few, and they stand out in the history of this disease, proving satisfactorily to many minds the mineral origin of the disease. Many persons pronounce it to be *arsenic*, and say that it arises in the form of vapor, settles upon the herbage, and is taken in with the food before its evaporation. I pretend not to say *what* particular mineral poison it is; but from all the facts before me, I think I am warranted in saying that it is a mineral poison.

The facts, also related above, as that it has been had in water, in a nude lot enclosed, in which cattle were sometimes kept for experimenting, in which lots the disease was had by cattle eating food which had been spread out over the surface of said lot, and the cattle allowed to eat of that food so remaining all night before the dew was evaporated, prove beyond all reasonable doubt its mineral origin. In such experiments, no vegetation could be had, for the enclosure was *nude*. No food was allowed only such as had to remain over the earth the overnight, and this to be ate before the evaporation of dew. And, on the other hand, the cattle could stay in the lot with impunity, if they were fed in the day time only, and with provender which had not come in contact, through the night, with the earth. He who would not, from these facts, if they are true facts, believe in its mineral origin, need not be further reasoned with. And that such experiments have been had, followed by such results, not once only, but frequently, I am perfectly assured, by unimpeached and unimpeachable testimony.

DIAGNOSIS.—There is no disease with which this may be confounded other than with a disease called by many practitioners “Typhoid Congestive Fever.” In this disease, in the regions of my practice, there is the same persistent nausea, continued efforts at vomiting, and generally almost the same persistent constipation, and the same want of peripheral circulation as observable in Milk Sickness. But there are these peculiarly marked dissimilarities: In Milk Sickness, there is a peculiar *fetor* arising from the patient, known from that of all others; a peculiar *fluid* ejected from the stomach, somewhat resembling indigo water, though of rather muddy color, and a peculiar persistent burning pain in the epigastrium. None of which are the absolute at-

tendants of congestive fever. The pulse is not so much disturbed as in typhoid congestive fever ; indeed, in many cases, it is almost normal as to frequency. No man, whether medical, or non-medical, that ever smelt the fetor arising from the body of those who have the Milk Sickness once, will ever forget, nor will he ever confound it with any other fetor. There is, you know, gentlemen, a peculiar fetor arising from persons laboring under mercurial ptyalism, which may be invariably recognized from all others by those who have paid any attention to the subject ; still it is difficult to describe that fetor so that others, who have never smelt it, may understand us. In Milk Sickness this fetor is more marked and unique. Before I ever knew anything of medicine, I have known physicians and others who, upon their first entrance into the sick chamber, and before they saw the patient, after nausea and vomiting had been set up, could invariably pronounce upon the disease. And I, gentlemen, though I claim neither superior knowledge nor skill, will risk my reputation upon this point. You may blind-fold me and lead me into the apartment of the sick, after nausea and vomiting have set in, and I shall be able to diagnose correctly without any possible chance of mistake.

PROGNOSIS.—Under favorable circumstances, such as an ordinarily good constitution, a good nurse, with well proved agents, you may almost always give a favorable prognosis. If you can get a thorough action upon the bowels before chemical action has obtained the mastery of vital forces, your patient can not die if he would. True, *you* may kill him if you choose; or not choosing, if you wish to be continually and blindly medicating, you may do the same thing. But once get up a thorough action upon the bowels, and then maintain their solubility by mild chologogues, and I defy your patient to die. True, he may always at times, under certain circumstances, feel the effects of the disease, and especially if the disease had much time to spend its force before you commenced your medication.

AUTOPSY.—I have never been at a *post mortem* examination in this disease, either in animal or man. Notwithstanding I have lived where hundreds of cattle have fallen its victims, I was never so curious as to expose myself where I thought no good could accrue from such exposure. It is a well admitted fact, that the disease may be communicated to humans by skinning animals

that have died of it, especially if such animals be opened. I have never lost a case in practice, and have not, therefore, had any chance of *post mortem* explorations.

In animals, it is said that the ventriculus or paunch, and, indeed, the whole alimentary tract, is as dry as tinder, and the feces very hard and dry. In a man who died of this disease, the following post mortem appearances, are said to have presented: "The peritoneum was strongly inflamed and gangrenous; the larger curvature of the stomach injected, of a bright pink hue; the mucous coat much destroyed and deprived of its epithelium, there having been the appearance of suppuration throughout its whole surface. Its veins were also highly injected. The duodenum was in much the same condition as the stomach, Brunner's glands were enlarged and red, but not ulcerated. The color of some parts pale, in others gangrenous. Ramollissement of substance of liver was noted; the gall bladder distended with sticky, inky fluid; the spleen enlarged and grumous." This account is taken from DR. DICKSON'S "Elements of Medicine."

SYMPTOMS.—Its incipient symptoms are langour, lassitude, a want of desire or energy to act, which are soon followed by nausea and vomiting, a peculiar fetor of breath and exhalations of the body; and the fluid ejected, especially after some continuance of the disease, is of a light indigo color, though somewhat of a muddy appearance. There is a constant burning sensation in the epigastrium, and the thirst is generally urgent, but all fluids taken, will in a few moments be ejected. Constipation, almost persistent, and all-potent, is one of its leading characteristics. There may be almost persistent constipation in other diseases, but which may be overcome, and *after* which, though your patient may be judiciously treated, still he may die. *Not so in Milk Sickness.* Overcome this difficulty in time, and your patient is invariably safe.

It is true that I have heard of patients in this disease, of whom it was said they had a lax condition of the bowels. Such patients *had not the Milk Sickness.* Typhoid Congestive Fever was mistaken for Milk Sickness. I have *never* been able to get up too much action upon the bowels, nor do I believe there can be by any known agent used within a thousand miles of propriety. I mean this can not be done until the great power of the disease has been

overcome. After the whole alimentary tract has been thoroughly unloaded, and the disease thereby shorn of its power, then indeed may the injudicious use of even good carthartic agents produce diarrhœa.

The surface, generally, is not hot; it is rather cooler than in good health. The extremities are invariably cooler, than normal. The skin is inactive and dead in appearance, and though not preternaturally warm, is always dry and husky, till changed by amendment of health, or till death commences its ravages. The fauces frequently become so inflamed and sore, in consequence of the passage over its surface of the poisonous fluids, that it is with difficulty that anything can be swallowed.

[To be Continued.]

DIOSCOREA VILLOSA.

YAM ROOT.

"Nat. Ord. Dioscoreacea. Sex. Syst. Diolcia Hexandria.

DESCRIPTION.—This plant, sometimes called colic-root, from the fact that it was used, and considered a specific in bilious colic, is a delicate, training vine, with a perennial root, from which proceeds a smooth, woolly, reddish-brown *stem*; one or two lines in diameter, and from five to fifteen feet long. The *leaves* are from two to four inches long, about three-fourths as wide, mostly alternate, occasionally nearly opposite or verticillate, in fours, broad ovate, distinctly cordate and acuminate, nine to eleven-veined, margin entire or wavy, villose with short, soft hairs on the lower surface, and glabrous on the upper. The *petioles* are elongated, the lowest somewhat verticillate in fours, the next sub-opposite, the middle and upper alternate, and from two to four. The flowers are dioecious, very small, of a pale-greenish color, and in axillary panicles or racemes. The *sterile flowers* have six stamens inserted on the base of the divisions of the six-parted perianth; *anthers* introrse, with the spikes paniculate; the fertile flowers have the ovary adherent, with three styles, and simple spikes. *Peduncles* axillary. *Ovaries* at first elliptic, but finally almost as

broad as long, about three fourths of an inch in length, three-celled, laculicidally three-valved by splitting through the winged angles. *Seeds*, one or two in each cell, flat, with a membranaceous margin.

HISTORY.—This is a slender vine, twining over bushes and fences in thickets and hedges, and flowering in June and July. It is a native of the United States and Canada, being, however, more common southward, and rare in the New England States. The root is the officinal part; it is long, woody, contorted, from an eighth to a fourth of an inch in diameter, with many fine, long, scattering fibers, of a light brownish-yellow color externally, and whitish internally, with a granular fracture, almost smooth, inodorous, except when bruised, then it emits a faint peculiar smell, and a not unpleasant, slightly bitter, sweetish and pungent taste. Water and alcohol are its solvents. No analysis has been made of this root, further than to extract its active constituent, *dioscorein*."

PROPERTIES AND USES.—Yam root was used by Dr. Bone, of New Jersey, in bilious colic, for the treatment of which he gained a notoriety in his own State but seldom equalled. The mode of using it, was to either make an infusion or decoction of the bruised root, in the proportion of an ounce of the root to one pint of water; after boiling fifteen minutes or half an hour, let stand till cool enough to drink, then let the patient take a teacupful every fifteen minutes till relieved, or the whole taken. In many cases of bilious colic, this quantity will be sufficient to afford relief, and restore the sufferer, as by magic, to health and quietude. Like all valuable medicines, however, it may fail to produce relief in cases dependent on some cause, or pathological condition, over which it has little or no control. In proof of which may be mentioned, colic brought about by a torpid condition of the liver, which may be partly but not entirely relieved, nor will the agent remove the pain, but will modify it materially, and afford time to the attending physician to use in connection, suitable agents to rouse the liver to action; used in this way, Yam root will be found a valuable, though not a sovereign remedy. Colic caused by ingesta of an irritating character, or a large quantity of indigestible food of any kind taken after fasting, can not be removed by the agent under consideration; but even in these cases it comes in as a valuable auxilliary in aid of the more appro-

priate agents. In a case of this kind, it must be apparent to every one, that the exciting cause ought to be removed as a preliminary step, after which, an infusion or decoction as before directed, will fill the indications most admirably, and crown the efforts to relieve the patient with success. The failures that have been met with in consequence of using the agent, were not the fault of the medicine, but of the person who used it in cases in which it was not a specific. Like all other valuable agents it is adapted to certain conditions of the system, and when it is properly used, and adapted to the case, there are but few agents of the *materia medica* so effectual. In truth, it is a sovereign remedy, and acts mildly and promptly in all cases where there is an abundant secretion of bile, in that state of the system known as bilious colic, and in no other condition does it display its powers so promptly and strikingly.

Besides its anti-spasmodic property, it is also anodyne and diaphoretic, though feebly so. It is these properties, beyond doubt, that render it so potent in the treatment of bilious colic. The tincture is said to be a valuable expectorant and diaphoretic, in moderate doses, varying from thirty drops to a teaspoonful. Having so many agents, more decidedly expectorant and diaphoretic, it is not likely that this will be relied upon in the treatment of disease requiring either the one or the other. In large doses, emetic.

DIOSCOREIN.

The resinoid principle of the root of *dioscorea villosa*.

This is the active principle of *dioscorea villosa*, which is manufactured and for sale in this city. It possesses all the properties of the crude article in a high degree, and it is as much a specific in bilious colic as the most potent anti-periodics are in the intermittent types of fever. It is applicable to all cases that the crude agent is, and in consequence of the smallness of the dose, is more readily taken. It may be combined with one or more of the numerous aromatics, in the proportion of one or two grains of the aromatics, to one of the dioscorein. This quantity may be taken, either alone or in a teaspoonful of brandy, to be repeated every fifteen minutes or half an hour, in mild cases. In more aggravated cases, from three to four grains of the dioscorein combined

with an equal quantity of the aromatics, taken in brandy, and repeated in half an hour. In flatulence and cramps of the stomach and bowels, it will be found a valuable auxilliary, either alone or combined. In nearly all cases of this kind it can be used to great advantage. Dose of the dioscorein: from one to four grains, repeated every fifteen minutes or half an hour, or not so often, as the circumstances require.

This agent being peculiar to reformers, though treated of in several works on *Materia Medica*, is nevertheless of sufficient importance to be noticed, and presented to the profession, in this brief manner, as an agent worthy their attention. T. J. W.

VARIOLA AND VARICELLA, OR, SMALL-POX AND CHICKEN-POX.

Small-Pox, though unimportant compared with *Scarlatina* and a few of the more dangerous diseases involving the derma, is nevertheless entitled to our attention and careful consideration. The frequency of its occurrence, and the great liability there is to mistake it for *Chicken-Pox*, have suggested the propriety of drawing a parallel between the two, and pointing out the important symptoms of each, so that the reader may have placed before him at a glance, their diagnostic and essential characteristics.

SMALL-POX.

1. It is confined to no period of life. All who are exposed may be the subjects of its attack.

2. The first stage is ushered in with rigors, followed by heat of skin, frequent pulse, furred tongue, loss of appetite, thirst, epigastric uneasiness, often nausea and vomiting, headache, pains in the back and limbs.—*Fever and headache* are the most constant of all the prodromic symptoms. The eruption us-

CHICKEN-POX.

1. It is confined almost exclusively to children, though not entirely so. Cases have been observed in persons of middle age.

2. The febrile symptoms are very light and sometimes imperceptible. They but seldom continue longer than two days, when the eruption appears.

usually appears on the third day, it may appear on the second or as late as the fifth, sixth, or even the seventh.

3. Usually, the eruption appears about the third day, first on the face, about the chin and mouth, and extends over the face, neck, trunk, limbs, feet and hands. The face being most affected.

4. Some time during the third day the eruption appears in the form of small, isolated, *rounded* red specks, which are soon converted into papules, and then into vesicles, each one containing a depression in the centre. As these changes continue the fluid becomes opaline, and is soon converted into pus, when the depression in the center disappears.

5. If the pock be opened when at maturity it will not flatten down on a level with the surrounding surface.

6. The desiccative process commences between the sixth and ninth days, and in the centre of each pustule will be found a small dark point, which extends and converts the whole pustule into a hard crust or scab.

7. Desiccation appears first on the face, sometimes as early as the sixth day, and in others as late as the ninth, and extends to the neck and limbs; and desquamation from the eleventh to the sixteenth, and terminates between the nineteenth and twenty-fifth, and in some cases as late as the fiftieth day of the eruption.

3. The eruption appears almost always on the breast and shoulders, and extends its ravages to the scalp, face and extremities. The face suffering the least.

4. At first the eruption appears in the form of small papular spots, of a deep red color, and *irregularly* circular. Either at, or soon after their appearance, they become vesicular, and are full and round, not depressed in the centre.

5. Should the pock be opened at maturity, its contents will pass out and its neck assume a level with the surrounding surface.

6. Desiccation commences at the margin, or circumference, of each vesicle.

7. On the fourth day the process of desiccation begins and goes on so rapidly that from the sixth to the ninth day the process is completed.

8. About the eighth day of the disease a febrile action is again frequently developed, constituting the secondary fever, and often more or less constitutional disturbance is apparent till the close of the disease.

9. The scabs are of a darkish-brown color, and quite thick and solid.

10. When the scabs fall off, they leave blotches of a reddish-brown color, which remain for months.

11. Desquamation leaves depressions which remain sometimes during life.

8. There is never any secondary fever, and never any constitutional disturbance after the eruption makes its appearance.

9. The scabs are thin and of a lightish-brown color.

10. After the scabs have fallen off there remains a discoloration of the skin, which lasts but for a short time.

11. Depressions are not found after desquamation, except the pocks have been violently treated by scratching them.

T. J. W.

POISONING BY SULPHUR.

A girl aged two years, with every indication of a vigorous and healthy constitution, was attacked on the 7th of April, 1855, with convulsions. I saw the child two hours after the attack; the spasm was clonic, the head was preternaturally warm, the extremities were cool, the bowels were much distended, and there were traces of clay or mud about the mouth. From the suddenness of the attack, I was suspicious that the child had eaten something that had caused the spasms. Upon inquiry, I was told that the child had been well and healthy up to the attack, and had eaten nothing unusual during the day; but upon further inquiry, I was informed that it had eaten some cabbage leaves in a state of decomposition, which I considered the exciting cause. Cold applications to the head, a warm bath, sinapisms, and anti-spasmodics were administered, and followed by a purgative, with relief. On the fourth and fifth days afterwards, the child had a chill in the morning, followed by fever and perspiration, but was immediately relieved by quinine.

Fourteen days after the chills, the child was attacked again

with convulsions of the tonic kind, at first affecting the right side, then the front of the body, afterwards the back, and finally the jaws. The whole abdomen was enormously distended and tympanitic. Nothing was administered by mouth because of trismus; an injection of a watery solution of assafœtida was ordered, and very copious discharges of the consistence of thin mush, resembling sulphur vivum, dark grey, and very fetid, followed, when the spasm immediately subsided, the muscles suddenly relaxed, and the child instantly died.

The history of the last case is about as follows. The mother had been giving once or twice a day to her children a small dose of sulphur and molasses, as prophylactics. On the evening preceding this case, the mother had made nearly a teacupful of the mixture, and was going to give her children the medicine, when her attention was called to another room. She left the mixture within the reach of her children, and on her return the cup had been emptied. One of her children had eaten all of it. She felt no uneasiness, as it was only *sulphur*, and it could do no harm. There was about a table spoonful of sulphur in the mixture. The child was unusually playful during the evening, and slept soundly all night. But the next morning the child was a little fretful, and continued so up to the attack.

The history of this case—the nature of the discharges, their peculiar fetor, and the sudden fatal issue, convinced me that it was a case of poisoning by sulphur. During the presence of sulphur in the digestive tube, there might have been the generation of sulphuretted hydrogen, and it might have been absorbed.

No instances of poisoning by the above article are given in any work on toxicology that I am aware of; but this appears to be a clear case to my mind. The exact amount of sulphur taken by the child at the last dose, would have been of importance if it could have been ascertained, notwithstanding what it had previously taken in small doses might have had some influence from its liability to accumulate in the bowels.

J. S.

THE WINTER LECTURES.

The Lecture Season is now rapidly approaching, and Medical Students are already casting their thoughts over the list of Medical Schools in our country, and some, perchance—yes, probably many—have an ambition that looks even beyond the institutions of our own country, and are now perhaps on their way to Europe, fondly cherishing their expectations of the superior opportunities they will there enjoy, and are speculating upon the vast advantages they will have in hearing the lectures of the great men they read of.

The great body, however, of those that are preparing themselves for the profession, appear to be satisfied, or else make a virtue of necessity, and will be found in the lecture halls of our own institutions. But even here they have to exercise a choice. There are various orders of Medical Schools, which represent different systems of medical practice. In addition to this, are a variety of other circumstances that will enter into the account, in deciding upon the particular Medical College the student is to attend. Besides the difference in point of talents, education, experience and skill, that may be possessed by the several Faculties of the different Colleges, there are other considerations, of perhaps greater importance than what involves the abilities of the teachers simply. These are the material facilities possessed by Colleges for communicating instruction. Among these are to be named first, the cabinets and apparatus, subjects for dissection, hospitals for clinical instruction, &c.

In view of these facts it is by no means amiss that some pertinent remarks should be dropped by any person who may have had an opportunity for observation in this connection.

In the first place, as to the choice of a College in view of the system of medical practice that may be taught, it is a matter of far less importance as to what a teacher's private medical faith may be, than it is that he should be a true philosopher and thorough enquirer after truth. By this it is not meant that it is a matter of little consideration as to what the leading principles of a medical teacher may be. But, on the other hand, it is intended here to indicate the difference between the true and industrious medical philosopher and the mere enthusiastic dogmatist.

The first is very sure to have the right principles, because he properly examines all that is proposed to be truth, he weighs all arguments, whether these be for him or against him; *i. e.* whether the results of his inquiry may appear to maintain his previous views or not. He is satisfied that his former views were carefully adopted, and will bear contest; but if overthrown, by a stronger fact, or by a better theory, he is free to make this his own, and he thus strives ever to advance in truth and to grow in knowledge. The philosopher is no bigot, he presumes not to know all things in advance of investigation—he does not judge of the merits of the different theories, by the examination simply of one or more, but he presses forward to know all the theories or systems equally well, so that he may thus be able fairly to judge which is the best, or the right one.

The dogmatist, on the other hand, rides his *hobby*, and by keeping only to it, he, by habit, really thinks his is the best, the finest and the prettiest steed in the kingdom—he thinks comparisons are odious; and no wonder that he is zealous, and enthusiastic. But it may be asked, what chance has he, in comparison to the other, for being right? and what kind of a teacher will he make by the side of the philosopher?

All truth, all light, all plans and systems should be presented as far as possible, so that the choice may be correctly made, and the proper system and theory of medicine indicated.

It is not improper to remark here that as experience, for nearly half a century, has now proven that the *heroic* means and *poisonous* drugs may be dispensed with, and that all the natural indications of cure can be as *perfectly, promptly, conveniently* and *certainly* fulfilled by safe and harmless agents, it is *rational* and proper that the latter should be employed in preference to the former.

This proposition does not imply that the *heroic* means have not been found *useful*, but it suggests that they may be, and are, alas, but too frequently *hurtful*.

That Medical College therefore should be preferred, which candidly and fully illustrates all methods of cure, and indicates the safest and the best, as that to be adopted.

When a student has determined upon the order of Medical Schools he shall attend, and has decided upon the kind of instruc-

tion he requires, he must then take into account the material facilities he is to have in his course of instruction. All Colleges are not equal in this regard, by any means. Nor are the oldest or longest established Colleges always best supplied with apparatus. Some old Colleges have *old notions*, and have not kept up with the improvements of the age—they still travel in the old *stage hacks*, while the *steam cars* rush by them with such amazing celerity that it makes the passengers of the old hacks giddy to look at them; while if the passengers of the *cars* look at the others they will be seen, as it were, wheeling in circles, far in the rear.

One of the most important of the material means for medical instruction, is dissection. Subjects should always be abundant in a Medical College, and hence those students are always the most fortunate who repair to large cities that have hospitals. These latter institutions, it is sad to remember, have ever furnished subjects sufficient for the Colleges of their vicinity.

Another advantage of hospitals, whose wards are open to students, is found in the clinical instruction that may be thus afforded. Hospitals located upon thoroughfares, whose wards may thence be supplied with patients from different sections of country, will afford more variety of clinical observation. Cities with quarantine arrangements, and pest-houses, when accessible to students, who are resolute, will also extend the opportunities for research and practical improvement.

With these facts before him, will it be supposed that the student will pass a metropolitan city, supplied with Colleges and hospitals, and repair to some country village to attend a medical school with mean facilities, and no clinical instruction whatever? It may sometimes happen that men of abilities are to be found as teachers in such obscure localities, but this is seldom the case; teachers, like students, aim to secure the best localities and facilities for instruction.

In selecting his College, therefore, the intelligent student will decide upon a liberal, progressive and prosperous reformatory institution—one having an able faculty, good cabinets, ample material for dissection and hospital privileges, with a reasonable guarantee for permanency, or perpetuity. A student does not like to be unable to refer to his alma mater in prosperity—a diploma from a defunct College is not esteemed.

There has as yet been nothing said of the professional tone and literary rank and moral character which indicate a first class Medical College. An institution whose conductors lose sight of the great interests of our noble profession—which should commend its votaries to an honorable peer-ship with the highest cultivators of truth, philosophy, and literature—but who would prostitute this sacred calling to a system of speculation or pecuniary gain, a love for distinction, or any other unworthy aim, should be treated with the solitary contempt it deserves. Any institution that would impose upon a community under the cover or authority of a *Diploma*, men unqualified for their assumed station, ought to be ignored by all, or held forth as an object for public execration.

In point of literary character, a medical institution should maintain a proud position. No institution of learning should be permitted to cast a shade upon it. Medicine has an antiquity, erudition, extent of scope, variety of subject, diversity of patronage, nobleness of aim, and intensity of interest, that should stimulate its cultivators to such an industry for study, and a zeal for learning as would place them in the highest niches in the temple of literary fame.

As to moral worth, who should possess it if not the Doctor? or what institution ought to be permitted to shame a Medical College that prepares the men who hold the sacred charges of life, and who guard the portals of health and happiness? J. K.

CLINICS IN THE COMMERCIAL HOSPITAL.

The preliminary course of Clinic Lectures in the above Institution commenced this morning, Saturday the 14th of September, at half-past 10 o'clock, A. M., and will be continued on Wednesday and Saturday of each week, during the preliminary and regular courses.

In the Medical Department Prof. Armor presented a case of Typhoid Fever. The patient, a male, about thirty years of age. As we entered the amphitheatre, the Prof. was dilating fluently on the symptoms peculiar to such cases; among which, he pointed out as characteristic, and on which he dwelt at length, may be mentioned the globular abdomen that is so frequently present, and relied upon as an almost unmistakable symptom, in connec-

tion with transient pain, increased by pressure, especially in the right iliac region, a gurgling sound of the bowels, produced by the application of the hand to the parts, and the peculiar rose-colored spots found on the abdomen, recognized at a glance, though generally present, not universally so ; in connection with small vesicles or sudamina, distributed over various parts of the body, were presented in a lucid and instructive manner. The most striking symptom of all, however, is the peculiar state in which Peyer's glands are found on post-mortem examination, when many of them will be seen in an ulcerated state, while others are merely verging on that condition, but are found enlarged and protruding into the bowel.

TREATMENT.—With a view to impress on the minds of those present, the importance of a judicious medication, in all such cases, he presented the negative action of remedial agents in a few appropriate remarks, which were understood to apply to the most objectionable agents in the treatment of the disease, in contradistinction to the most appropriate. Croton oil, said he, is the agent above all others the most objectionable. The patient was using the spirits of mindererus and the syrup of ipecacuanha, which were spoken of as being very appropriate.

In the surgical department, Prof. Blackman presented a case of caries of the left fibula. The patient, a male, verging on the meridian of life. The limb had a swollen appearance and a livid hue.

The patient was brought under the influence of chloroform, when the operator commenced by cutting down to the bone, then separating the fibula three inches above the ankle with a small saw—disarticulated the fragment and removed the inferior fourth, or fifth, of the bone.

The third case, a male about thirty years of age, with a fracture of the inferior maxillary bone. A number of loose fragments of bone were extracted with the forceps, and the patient sent into the ward to have the wound dressed.

The fourth, and last, was a case of erysipelas, a female about 22 years of age, involving the left limb, which was very much swollen, the swelling extending into the thigh, and the skin of a very dark color, produced, in all probability, by the local applications. She had been under the care of professor Wood,

and recently under the care of Prof. Blackman. The former had used, as a local application, a solution of nitrate of silver, which was changed by Dr. Blackman, for his favorite solution, consisting of sulphate of iron, which was continued.

Prof. Lawson made a few remarks upon the nature and character of the disease under consideration. It is a disease, said he, involving the skin, and its ravages are frequently extended to the mucous and serous tissues. It is sometimes sporadic, at others epidemic. Though local in one sense, it is constitutional in another. The patient before him had a dry skin, but it was not much hotter than natural, tongue dry, and red along the margin, pulse small and frequent, appetite poor, great general weakness.

TREATMENT.—Tonics and stimulants are indicated in connection with a generous diet. The local application may consist of a solution of the nitrate of silver, sulphate of iron, or the tincture of iodine, any one of which, said he, will be found sufficient, because the skin had a shrivelled appearance, indicative of the decline of the disease. W.

MR. EDITOR :—Your “American Medical Journal” was duly received by last evening’s mail, and as I have a few spare minutes, let me say, I am really delighted with the idea of the publication of another Medical Journal, which is to be the exponent of our College, and the standard bearer of a safe and efficient practice of Medicine. It will not be expected, I presume, by those who receive the first number, that it will contain the exact matter adapted to the wants of the profession, but age will bring in valuable contributions, which will be just the matter to meet the wants of the profession. In order to make a Medical Journal interesting and valuable, it must contain practicable matter; that which will instruct the practitioner at the bedside of the sick, and this is the great benefit of our Journals. In order to make the medical periodical valuable to him who is practicing the healing art, practical knowledge must be imparted, and by him who has had experience, as well as a sound medical training. I hope every practitioner who takes an interest in our College, will lend his aid in making the Journal one of the best now published.

I am very respectfully yours,

W. W. INGALLS.

Ohio, Sept., 1856.

CONGESTIVE CHILLS.

In the treatment of "congestive chills," there are two indications: First, break up the chill by bringing on reaction. Second, prevent a recurrence of the chill. When called to a case while the chill is on, I move the patient bodily, so that his feet and legs project beyond the foot of the bed; wrap them in several thicknesses of cloth; place a tub of hot water under them, and pour the water, as warm as can be borne, on the projecting extremities, from twenty to forty minutes. While this is going on, I administer freely a strong infusion of three parts *ginger* and one of *cloves*, with broken doses of the compound tincture of capsicum. After a few doses of the infusion and tincture, the patient begins to feel quite restless; he throws his arms about (jactitation) and appears to be unable to place his body in a position to suit him. When the pediluvium is over, I dry and rub well the extremities with coarse cloths—apply, plentifully, a stimulating liniment, and then put a jug of warm water near the feet. I now give the *infusion*, with *full* doses of the *tincture* every ten minutes, until full vomiting is produced. By this time (if the patient has not been too much broken down by previous disease or mal-treatment,) the breathing is full and deep; the headache, if any existed, disappears; the fullness and tension are gone, and a warm glow, with a natural moisture, is felt over the whole surface. Should, however, these favorable results not follow from the first *full* vomiting, I keep up the nausea, with occasional emesis, until they do. If it is a quotidian—after ascertaining that the favorable group of symptoms, just mentioned, are not transitory—I put the patient, at once, upon a dose every hour, composed of one and a half grains of quinine, three grains of capsicum, and if not contra-indicated, half a grain of apocinum androsemifolium. And, every third hour, a wine glassful of a bitter, of the following ingredients, digested to saturation, in equal parts of spirits and water or Sicily wine. \mathcal{R} Prunus virginiana, one part; Cornus florida, do; Populus tremuloides, do; Hydrastis canadensis, do; Columbo. do; Capsicum 1-6th.

This treatment is kept up until the period of the return of the chill is well past, then the quinine is given every two hours, and the bitters as before for twenty-four hours. After this, to prevent relapse, I keep up the bitters, and a three grain pill of *cornine* (active principle of dogwood) eight times a day, for four or five days, or as long as it may seem to be necessary. F. M. K.

CASE OF TYPHOID FEVER.

Miss A. A., 22 years of age, bilious and nervous temperament. Prostration, lethargy, and occasional diarrhœa for some weeks.

Dec 4. 1851, SYMPTOMS:—Slight pain in the head; much pain in the chest; difficult respiration; oppression of the lungs; bowels tympanitic, tender and inelastic; tongue covered with a white coat; eyes, suffused and glassy; pulse 100, hard and quick; much tenderness on pressure in the occipital region; moderate thirst; slight irritation of the stomach, nausea and vomiting; countenance haggard and depressed; skin bluish, dry, very warm; urine high-colored and very scanty, micturition difficult; lying upon her back; knees slightly flexed, somewhat sunken in bed; sleep very imperfect.

DIAGNOSIS—Typhoid Fever.

PROGNOSIS—The case, I expect, will terminate favorably, but it will be a slow recovery.

TREATMENT.—Mustard plaster to the front and sides of the trunk, alternated with hop fomentations; mustard plaster between the shoulders, to the feet, alternated with sweet oil; ten drops of compound tincture of capsicum in two or three drachms of a diaphoretic infusion, every two hours; bland diet; room well ventilated.

Dec. 5.—Respiration much improved; pain and soreness diminished in the chest, abdomen, and occiput; urine free; bowels quiet, less distended and more elastic; pulse 100, not so hard, and sleep improved. Ordered podophyllin one-eighth of a grain, and one grain of sugar, triturated, every four hours; one or two pills of lobelia, capsicum, and ulmus, as often, and an infusion of cypripedium. The cathartic to be suspended as soon as it moves the bowels. External applications continued; an alkaline wash in the evening, to be followed with an embrocation of lard and capsicum; prepared by simmering a drachm of capsicum in two ounces of lard, for thirty minutes, and then strained.

Dec. 6. Cathartic has operated nine times; stools of sero-purulent and bilious character; frequent vomiting of dark bilious matter; pulse 100, softer; soreness gone from occiput, chest, and bowels; the inelasticity of the abdomen has disappeared: and some appetite. Ordered a decoction of myrica c., and populus, with a little brandy, peach kernels, and sugar, every

three hours, and an infusion of cypripedium p., and ulmus f., external applications the same.

Dec. 7. Much improved ; rose spots have appeared, pulse 100. Ordered the treatment of yesterday continued.

Dec. 9. Pulse 85, rapidly improving. The fomentations and mustard plasters discontinued.

Dec. 11. Patient is dressed and sitting up, pulse, 85. Ordered Iceland moss infusion.

Dec. 12. Sudamina are manifesting themselves, and no more medical attention is required. C.

PLEURISY, COMPLICATIONS, AND FINALLY SMALL-POX.

Mr. J. S. L——, of 39 years, sanguine and bilious temperament, an ordinary constitution, has been complaining six or eight days. He was taken with a chilly sensation, accompanied with yawning and stretching, followed by slight fever, and severe pain in the right side, April 5th, 1856.

His wife gave him a diaphoretic infusion ; the symptoms continued the same ; she then administered an emetic ; the case was not modified by it, and I was sent for on the 8th of April.

SYMPTOMS—A sense of pain in the left side ; painful respiration ; no cough ; no pain in the head nor back ; tongue slightly coated, yellow, and moist ; pulse 90, and jerking ; bowels, tumid and very doughy ; urine rather scanty, high colored ; micturition painful ; a heavy sediment in the urine after standing ; no soreness in the throat ; surface, very dry and very warm ; a slight thirst ; pain in the fleshy part of the fore arm of an acute and excessively severe character ; the thumb and the first two fingers, could not be extended ; countenance depressed, dejected, and haggard.

DIAGNOSIS—Pleuritis, complicated with Typhoid and Congestive conditions.

PROGNOSIS—Severe attack, stubborn, yet expect a favorable issue.

TREATMENT—Ordered a diaphoretic which caused a gentle diaphoresis for some hours, and an emetic which caused free emesis. The surface was then bathed in alkaline water, the bodily garments were changed, and a slight quantity of fluid aliment taken. After which an infusion of asclepias t., myrica

c., and amomum z., was orderd, in conjunction with two pills, every third hour of ulmus f., capsicum a., and lobelia i., equal parts; a cathartic of podophyllin and leptandrin one half gr. each, and ten grs. of sugar, triturated, repeated every third hour, until catharsis; fomentations of hops to the chest and abdomen, renewed every second hour, and sinapisms to the left side and to the feet.

April 9, 7 o'clock, P. M., pulse 85, gentle perspiration, pain in the side not so severe, respiration still painful, tenderness on pressure, tongue covered with a white loose coat, and moist; cathartic, repeated. The pills and infusions continued. And a decoction of hydrastus c., populous t., myrica c., joined with brandy, sugar, and pulv. peach kernel, ordered after catharsis.

April 11, 5 o'clock, P. M. The cathartic had operated kindly, and produced copious bilious and sero-purulent stools; pulse 85, weaker; tongue cleaner; breathing easier; pain in the left side, modified, only appearing in full inspiration; abdomen elastic; sleep, tolerably good; and surface, the same. Ordered the decoction to be stopped; and a solution of quinine in gelseminum s., substituted, in 25 drop doses every third hour. Pills and infusion continued.

April, 14. But a little change; pulse is more frequent, and feebler; marked depression, and at times delirium. Ordered prusiate of iron and quinine, and dry heat to the extremities.

April 18. The patient is still sinking, restless, and more delirious. Ordered brandy and the compound tincture of capsicum a.

April 20. I discovered for the first time an ordinary sized Small-Pox pustule on the right cheek, and on further examination, we (Dr. Wilson was with me, as consulting physcian) found several well defined Small-Pox pustules on various parts of the body. The next day the patient died.

QUERY:—Did the Pleuritis take precedence, and keep back the Small-Pox, until it disappeared, when the vitality of the system was so much exhausted, that it could not determine the virus to the surface, because of which the patient sank? Or did he inhale the virus on the 4th, and it lay maturing 10 days, and when prepared for the surface—its regular outlet—the forces of the body were too far spent, to carry it there in sufficient quantity to relieve the system?

C.

Editorial.

A HOPEFUL STUDENT.—We learn from a recent issue in this city that Dr. L. E. Jones, of various notorieties, who lives in a foam of love for us, has lately been improving his medical knowledge, by reading some of our old articles. This is as it should be, Doctor; you are now in the direction of science, continue your efforts, be diligent, and we will encourage you. If our articles prove too weighty and philosophical for your capacities, just call at our office, and we will simplify them for you, at our convenience.

A MORAL CURIOSITY.—It is very satisfactory to meet, in the medical profession, where hypocrisy, rivalry, and abuse, so often appear, occasionally a genuine, whole-souled Christian—one who carries the Sermon on the Mount into every transaction of professional life. To meet but one even in a life time, so true to fact, so exact to reality, so faithful to confidence, so honest, so peace-loving, so fraternal, so profoundly righteous, far more than counter-balances in solid happiness all the wrong done by the hosts of deceit, mendacity, and abuse. Reader, can you believe it, that to-day we have met such a pure being? That to day we have experienced this rare joy? An article from our illustrious and quondam bed-fellow—Dr. Baldrige—in the E. M. Journal, for patronage to the coming class of the Unchristened College, and for the reasons that caused him to turn his back upon his beloved American College, where coloring of facts and elasticity of conscience might have been expected, is so remarkable for veracity, so unusual for disinterestedness, so complete an embodiment of the good old “golden rule,” that we are becoming satisfied with our lot, are beginning to forgive our enemies, and are thinking about joining the holy band. How much we have lost in not knowing sooner, the qualities of this rare, magnanimous, and just Luminary of the Profession!

BLOOD AS A REMEDY.—M. Rimaud advises the use of recently drawn calf's blood in wine glass doses, after fasting, in anemia, diabetes, certain forms of chlorosis, etc.

MINERALIZATION OF ANIMAL BODIES.—Chlorides of the metallic earths—especially the chloride of aluminum, discovered by M

Lapeyrouse, and recently experimented upon by Mr. Barbet, when injected into the veins, or when flesh is immersed in them, prevent putrefaction. This is invaluable to the student of organic science.

DRUNKENNESS CURED.—Give the subject a glass of water containing 15 drops of liquid ammonia, and he will soon come to himself, get up, and go away.

SEDATIVE LIQUID.—Water 3jv; ammonia 3ijss; tinc. of camphor 3j; salt 3jss; mix. Compresses saturated in the liquid, have a happy effect in sprains, luxations, contusions, erysipelas, and stings of bees and wasps.

ENGOREGMENTS.—Water 3jx; hydrochlorate of ammonia 3jss, mixed. Dose is a dessert spoonful night and morning in a glass of water.

REMEDY FOR SCROFULA.—Water 3jx; hydrochlorate of ammonia 3jss; iodide of potassium 3ijss; mix. A dessert spoonful night and morning. Locally for scrofulous sores, nitrate of copper 3j; cider vinegar 3ij, applied with a soft brush twice a day; if the pain is severe, dilute it.

AMMONIACAL SALTS—Are all valuable remedies for the resolution of inflammation, congestion, engorgement, depositions, and indurations. Acetate, hydrochlorate, nitrate, sulphate, &c.

ACTION OF SUGAR ON THE TEETH.—M. Larez, in a course of investigation, arrived at the following conclusions, viz:

1. Refined sugar is injurious to teeth, by contact, and by the gas developed in the stomach.
2. If a tooth is macerated in a saturated solution of sugar, it is so much altered in its chemical composition that it becomes gelatinous, and its enamel opaque, spongy, and brittle.
3. This modification is due, not to free acid, but to a tendency of sugar to combine with the calcareous basis of the tooth.

IODIDE OF POTASSIUM IN INTERMITTENT FEVER.—Dr. E. F. Sunkey, of Ill., has treated one hundred consecutive cases of Intermittent Fever with Iodide of Potassium successfully. R Iodide of Pot. 3jss; peppermint water 3xij. Dose, two large spoonfuls every hour.

TYPHUS FEVER AND TONICS.—Dr. E. R. Maxon, of N. Y., says, with a sustaining course of treatment, nearly every case of typhus may be arrested, and the patient convalescent by the sixth day. His treatment, viz., hepatic; very warm foot baths night and morning for the first days; tincture or infusion of capsicum in vinegar, rubbed upon the whole spine; a diaphoretic and quinine, each iv grains every six hours, for two days; then camphor gr. j; quinine grs. iij every six hours, till the fever is arrested, giving crust coffee with milk, at first freely, and as soon as the stomach will bear it, toast every six hours. In neglected and very bad cases, sinapisms and dry cupping are useful.

LIENTERY BY PEPSIN.—Pepsin in one grain dose at the beginning of each meal, determines a marked improvement in the digestive process, and the stools which before abounded in indigestive matter, take on the character of normal fœcal discharges. (Bul. de Therap.)

SULPHURIC ACID.—Professor Hauner of Munich says this acid has rendered the greatest service in typhoid, and exanthemous fevers, and in diseases of the blood and vascular system. Syrup of marshmallows ʒjvss; acid ʒss to ʒj. A table spoonful of this compound with some common drink.

CHLORATE OF POTASSA.—In seventy cases of stomatitis and ulcers of the mouth Professor Hauner used this remedy with constant success. The results were wonderful; for in four hours the disagreeable odor, of the mouth disappeared, and the cures were rapid. Water ʒiv; simple syrup ʒss; chlorate of potassa ʒj: mixed, and used in twenty-four hours.

TYPHOID FEVER BY DR. J. R. SMITH, ALA.—Dr. Smith says *that he has been treating successfully typhoid fever of all forms, grades, and stages, by locking up and so keeping the bowels, until the patient is convalescent beyond a doubt.* If the bowels are active, he prescribes forty drops of the *tinc. of opium*, and a similar dose at every subsequent operation. And after the first dose of opium, he ordered the following powder every two, four, or six hours, depending upon the purging, and abdominal symptoms: Tannin grs. xxxvi; Dover's powder ʒ; mixed, divided into twelve powders. No action of the bowels does he favor. He *completely locks* the bowels.

HICCOUGH AND VOMITING.—Apply lightly a bandage around the body over the attachment of the diaphragm.

COMMERCIAL HOSPITAL.—This institution is abundantly furnished with acute, chronic and surgical cases. The Medical department is under the superintendence of Prof. Armor, and the Surgical is under that of Prof. Blackman; gentleman of superior attainments, medical experience, and liberality. Its doors are open to the students of the American College. Ticket \$5.

During the past Session an immense number of capital operations were performed by Prof. Blackman, among which may be enumerated: Ligature of the external Iliac artery; Lithotomy; Amputation at the Hip-joint; Amputation at the Shoulder-joint; Amputation of the Thigh; at the Knee-joint; of the Leg, etc., etc., Cataract; Artificial-pupil; Varicocele; Hydrocele; Trephining skull; Ex-section of head of femur; Ex-section of posterior wall of spinal column; Extirpation of Eye; Plastic operations; numerous operations for necrosis, caries, and other affections of the bones; Hydrarthrosis of the Knee; Nasal Polypi; and minor operations too tedious to mention.

GOOD BOARD.—Students can obtain this necessary article for \$3 per week. Room, fire, lights, and board can be had for \$3.50. A common article can be had for less. And boarding by clubs can be obtained for about \$1.00 per week.

GIBSON HOUSE.—Students on arriving in the city, will find the accommodations of this House every way satisfactory. It is opposite the College, on Walnut street, between Fourth and Fifth streets; and by stepping into the College, good Boarding-houses will be pointed out to them.

A. M. & S. JOURNAL.—All those who paid Dr. Potter for his Journal for the year 1856, and will inform Dr. Wright of the same, will, according to a statement of the Faculty in the September No., receive the American Medical Journal for one year. Please so inform the Dean immediately.

PRELIMINARY COURSE.—Commences on the first Monday of October. Students will find this Course in connection with the Hospital lectures (both free) interesting and valuable.

LECTURES UPON YELLOW AND CONGESTIVE FEVERS.—Prof. F. M. King, M. D., of Pine Bluff, Copiah Co., Miss., will deliver a series of Lectures upon these very grave diseases, during the Preliminary Course of the A. M. College, commencing on the 15th of October. No man in the South, probably, has had better success, nor more experience in these fearful fevers, than Prof. King. Students will find the opening course of lectures of great value.

TUBERCLE.—The pathology, diagnosis, and treatment of this scourge of man, and heretofore Malakoff of the Profession, will constitute the subject matter of the lectures of Prof. Jacob Snyder, M. D., of Dublin, Ind., during the Preliminary Course of the A. M. College. Prof. Snyder will bring forward in these lectures his improved method of treatment.

PROGRESSIVE MEDICINE.—Experienced members of the Profession are cordially solicited to give through the Journal to their brethren their improved and new methods of cure.

WINTER SESSION.—From present indications the coming Class of the A. M. College will number 100 students. Our past Students are laboring with zeal for the American, and so are all its friends.

NAMES AND RESIDENCES—Of Practitioners and Students are requested. We shall be greatly obliged to any one who will give us the names and residences of Physicians and Students in his vicinity.

LIQUID CAOUTCHOUC.—This is said to be of the color and consistency of milk, and is preserved in the fluid state by the addition of free ammonia. As an external application, it has many advantages over both collodion and gutta percha dissolved in chloroform. It is not stimulating and painful, as are both the others in certain cases; it does not contract, like collodion; and on account of its elasticity, it allows entire freedom of motion. Water does not act upon or remove it; and it adheres closely to the skin. In the treatment of burns, erysipelas, and many other surgical diseases which require exclusion of the atmosphere, it answers the purpose so perfectly as to render any other preparation scarcely desirable.

S.

SEVENTH ANNOUNCEMENT
OF THE
AMERICAN MEDICAL COLLEGE.

College Hall, Walnut, between Fourth and Fifth Streets, Cincinnati, Ohio.

Incorporated 1854. Whole number of Students 262.

FACULTY.

- F. M. KING, M. D., Professor of Theory and Practice of Medicine.
R. C. CARTER, M. D., Professor of Obstetrics, and Diseases of Women and Children.
JACOB SNYDER, M. D., Professor of Medical Surgery, and Medical Jurisprudence.
JOHN KOST, M. D., Professor of Materia Medica, Therapeutics and Botany.
J. S. GALLOWAY, M. D., Professor of Chemistry, Pharmacy, and Toxicology.
T. J. WRIGHT, M. D., Professor of Anatomy and Operative Surgery.
E. H. STOCKWELL, M. D., Professor of Physiology and Pathology.
S. H. POTTER, M. D., Professor of Practical Medicine.
R. RICHARD CLAY, M. D., Demonstrator of Anatomy.

The Trustees of the American Medical College take great pleasure in being able to state to its Alumni, to its friends, and to the Profession, that its prospects are very encouraging. The completeness of its organization, and its reputation at home and abroad, are an earnest of its prosperity.

The chairs vacated by the voluntary resignations of Professors Witt, Cochran and Baldridge, (who left in good feeling) have been again filled by men of superior talents and attainments, and who will fully do their part in sustaining the growing reputation of the College.

The Trustees, in filling the vacancies in the corps of Teachers, have had in view associative qualities, energy, reliability, permanence, practical experience, and scientific attainments; all of which are conspicuously possessed by each member of the Faculty. There is not a perceptible element of disaffection nor of change in the Institution. Five of the members reside in the city, and the others are so accessible as to enable them faithfully to meet their engagements with the College.

In all ages of the Profession, medicines have been chargeable with mischief; there have ever been two classes of remedial agents, viz.: those that were mischievous only in unskilful hands, and those that were mischievous whatever the precaution.

The former class, until lately, has been limited in articles and in power, while the latter has been potent and numerous. But recently the safe agents have been greatly augmented in qualities,

efficiency and numbers, so much so, that in resources for the removal of disease they have far outstripped the unsafe agents.

The fact that the unreliable agents of the *Materia Medica* have been superseded by the reliable ones, lately discovered, is of great importance to the medical student. Besides, it is the most useful and note-worthy achievement of the Profession.

No longer is the scientific physician under the disagreeable necessity of resorting to the use internally, for the removal of disease, of articles which will not submit to control. Their places are more than made good by numerous botanical and chemical accessions to the *Materia Medica* within the last ten years.

There will be a pleasing bias and proclivity in the teachings of the American College towards those agents that are limited to the production of health; to those articles that will bear control; to those medicines which foster the physiological state; to those means that are only equal to the abolition of disease: to those measures that do not leave behind them pathological foot-marks; to those remedies that do not in one edge carry a healing balm, and in the other the besom of destruction.

Though the Profession is pervaded with a rank partisan spirit, yet the Faculty of the *American Medical College* will warmly maintain that individual toleration, personal independence, and private judgment are the great pillars of manhood, science and art. The rule is a wholesome one that grants to every member of the Profession that which each claims for himself.

The Institution is centrally located, occupying a suitable portion of College Hall, on Walnut street, between Fourth and Fifth, which is the largest public building in the city. The College apartments comprise a commodious hall for general lectures, amphitheater, laboratory, and ample room for dissections.

The College is provided with complete chemical apparatus, microscope for the prosecution of microscopic anatomy, anatomical and pathological museum, extensive collection of specimens in osteology, and numerous anatomical plates as large as life. Thus it will be seen that this Institution has full and ample facilities, which, with an able and practical Board of Instructors, consisting of seven eminent Professors, presents rare attractions to medical students who wish to attend medical lectures.

Ample Hospital privileges are guarantied to the students, and arrangements are made for an abundant supply of anatomical

material for dissections thereby furnishing every facility in this highly important branch of medical science.

REQUISITIONS FOR GRADUATION.

1. Three years' regular study of Medicine, under the guidance of a reputable practitioner.

2. Attendance upon two full courses of lectures, the last in this Institution.

3. Four years' regular and reputable practice will be received as equivalent to one course of lectures.

4. One course of dissection.

5. The candidate should deposit with the Dean a satisfactory Thesis on some medical subject, with the Diploma Fee, on or before the first of January, 1857.

6. The Candidate should be twenty-one years of age, and of good moral character.

7. He must undergo a satisfactory examination by each member of the Faculty, and be approved by the Board of Trustees.

The public Commencement will take place as soon as practicable after the close of the term.

The standard medical authorities are recommended as text books.

Preliminary lectures will commence on Monday, the 6th day of October next, and continue four weeks; and the regular term of sixteen weeks will open on the first Monday of November.

FEES.

Matriculation Ticket	-	-	-	-	-	\$5,00
Tickets for the winter course	-	-	-	-	-	\$20,00
Dissecting Ticket	-	-	-	-	-	\$5,00
Hospital Ticket [Optional]	-	-	-	-	-	\$5,00
Graduation Fee	-	-	-	-	-	\$25,00

Boarding and Lodging (including fuel and lights) can be obtained at \$3,00 per week.

Students on arriving in the city, by calling at the College building, on Walnut, between Fourth and Fifth Streets, will be directed to good boarding houses.

Further information may be obtained by addressing the Dean,

T. J. WRIGHT, M. D.,
No. 8 George St., Cincinnati, O.

THE

AMERICAN MEDICAL JOURNAL.

VOL. I.

CINCINNATI, O., NOVEMBER, 1856.

No. 3.

ESSAY ON MILK SICKNESS.

BY ALFRED MALONE, M. D., OF PALESTINE, ILL.

Delivered before the Medical Class of the "American Medical College," Cincinnati, O., March 25th, 1856.

[Concluded from last No.]

TREATMENT.—Among Allopathics, generally, where I have been, calomel, castor oil, croton oil, and opium, constitute the treatment. Within three miles of my residence, *five* out of one family died of this disease, last season under this treatment. And the five constituted the whole. Nor do I charge upon the physicians mal-practice. By no means. Three of the best of our physicians were in attendance upon this family. Hence we may reasonably infer, that all was done that could be done by Allopathy. In the disease, under its treatment, a fearful mortality attends. Within the bounds of my acquaintance in Indiana and Illinois, under this treatment, about *four-fifths* have died.

In DR. DICKSON'S "Elements of Medicine," a recent work of great merit in the Allopathic ranks, emetics, leeches to the abdomen, ice, mercurial purgatives, opium and enemata, are recommended. This he says would be his treatment, should a case occur in his practice. The emetic is ipecacuanha, to be given in the first stage. Mercurials and oil are to be pushed to purgation, aided by enemata. He also speaks of the almost entire dependence of some practitioners upon gamboge, aloes and other drastic cathartics.

GENTLEMEN :—This treatment is not brought upon the tapis for animadversion. I only give it as *the best* Allopathic practice, with its general results. The friends of Allopathy have an indisputable right to their favorite practice, and its practitioners have the right to practice according to its governing principles, and the right to our courtesy as men and physicians. If indeed there is a better way, and if we can, by manful and courteous investigations, convince them of that better way, and more especially if our practice will demonstrate the superiority of that better way, then have *we* the right to demand their courtesy towards us as gentlemen and physicians. Not otherwise.

I also know some of the New School men, who taking the constant vomiting to be nature's efforts to rid herself of disease, and believing *lobelia* to be the one and only thing needful, have been as unsuccessful as the Old School men. Such a course, it is true, has relieved nature of some suffering by sending the patients to the lower country !

I will now give you my treatment, and the success:

FORMATIVE STAGE.—If I have a patient in a Milk-Sick region in the time of its prevalence, and before he is compelled to take his bed and even afterwards, if before persistent nausea and vomiting have set in, I induce him to drink as much good spirits as he wants or can, without intoxication. And let me say that persons laboring under its incipient stage, can drink ten times as much without intoxication as when well. This article, where its efficacy is known, is acknowledged to have a universal power over, and applicability to, the formative stage. *How* it acts, I do not know ; but that it does, in some way, neutralize and render inert the poison, is certain—incontrovertible. If this prescription be too simple to suit your sublimated views of Medical Science, then order the following :

R Sulphur Sublimatum ʒ jv. Spiritus Rectificatus Dilutum f ʒ xvj. Shake well before taking. DOSE: f ʒ ss to f ʒ j every hour till action on bowels is had. You need not fear this medicine in this stage. It will neither stimulate nor intoxicate to any considerable extent, until it has somewhat controlled the disease. A patient in this stage may drink a gallon per day, if needed, without any detriment, and with great good. And your rule is to give enough to produce the effect, and this will be obtained

before intoxication. You have now, therefore, no more use for this remedy. It is a universally admitted fact, I believe, that spirits neutralize, or, in some way, destroy snake poison; that immense and incredible quantities of liquor may be taken in such cases, with perfect impunity, and with the happiest results. If, therefore, empiricism be hurled at me for the recommendation of liquor in Milk-Sickness, because I can not explain its *modus operandi* in said disease, I would, also, ask these *hyper-scientific theorists*, how it acts in snake bites to destroy its poison? That it does so act is too palpable to deny. If I were bitten by a poisonous snake, I should want no mere *theorist* to treat me, but a *practical* man—one who would give, independent of the sneers of the *hyper-scientific bookworm theorists*—that which universal *experience* had taught to be efficient.

Let me be here understood, once for all. I do not *decry* medical literature, scientific investigations, nor medical philosophy. On the contrary, I believe that the more the medical man knows of the Science of Medicine, and collateral sciences, the better, *provided* he is also a *practical* man. He can not know too much of Anatomy, Physiology, Pathology and all else that appertains to the Medical Philosopher. All this will throw a flood of light upon the theory and practice of Medicine, explaining upon scientific principles the *adaptability* of *known, tried* materia, to certain pathological conditions, and their *modus operandi* in the cure of disease. When I am sick, give me both the Medical Philosopher, and Practical Physician, but if I must have one *alone*, then let me have the practical man, who, by *experience*, has become rich in the resources of his art.

These remarks, may be condemned as irrelevant to my subject; but as the practice which I have adopted in this disease, must necessarily be somewhat empirical, I thought it due to myself and the occasion, to step aside in order to offer an apology for empiricism where scientific rules can not govern the art. Where, therefore, the pathology of a disease is not well understood, and where no fixed scientific rules can govern in the administration of medicines, then must proud philosophy *bow* to practical experience—empiricism. With this apology, therefore, I proceed.

SECOND STAGE.—If you are called in its commencement, perhaps a mild, but thorough emetic would be of service. I prefer

lobelia to any other emetic in this disease. A strong infusion, preceded by warm aromatic teas, given in sufficient amount, two or three moments apart, to produce emesis, is what is needed; this done, and you have done all for your patient, in this disease, that can be done by emetics. Unless you can give this in the commencement of this stage, you had better not give it, as you will only increase the difficulty by any emetic which you may administer. In such cases, in this stage, my only prescription thus far, to allay nervous excitability, nausea and vomiting, is the following :

R Lob. plant, Cypripedium, Asselepias, a a. Make a weak infusion.

Dose, for an adult, not more than 20 or 30 drops at farthest. It, however, must be given every 8 or 10 minutes until nausea is arrested. This it will arrest, and no mistake ! Such, however, may sound strange to those of you who have had but little practice. Every practitioner, however, who has ever used it in this way, in such cases, will tell you that this is the fact. I should now, perhaps, as a matter of convenience and change, had I a case to treat, use instead of the above, the 20th part gr. *sul. morphia* every half hour or so, in a strong infusion of *peach tree leaves* and a thick mucilage of *elm*. I have used this preparation in Congestive Fever with the happiest results. All *anti-emetics* had proved powerless. This, however, did the work. Now as before remarked, there is a strong resemblance between the two diseases, especially in the vomiting. Reasoning, therefore, analogically, what would be good for the same condition of the one, would be equally as good for a similar condition of the other.

SINIPISMS.—You may, if you choose, use a mustard draft or poultice over the stomach as an adjunct remedy in this stage; but keep away your *cantharides*, if you do not wish trouble. The whole tendency of the disease is to destruction of tissue, from first to last; keep off, therefore, your blister, or you may produce an incurable wound both upon your patient and your reputation !

PURGATIVES.—Now, the very first moment these can be retained upon the stomach, these are *the means* to be used. Upon these and these alone are you to rely mainly for your success. As before remarked, an early and thorough evacuation of the bowels, is *the* great desideratum. This obtained in time, and their solu-

bility maintained, and you have your disease under perfect remedial control. You have more—it is already mastered. The articles upon which I have relied, and with which I have always been successful, are *syrupus leptandriae* and *oleum ricini*. These, with but one case excepted, are the cathartics upon which I have heretofore relied. I made my own syrup; for these cases, with the one exception, were treated before I got to using the concentrated preparations. I made the syrup strong, and gave as much as the stomach could bear every hour or so, until catharsis supervened, or until three or four doses had been taken. I then followed up with the oil. You need not, in this disease, fear to give too much of these articles. Your only rule is, give enough, and until you effect your object.

And, in reference to castor oil, I do not believe that, in this disease, there is a superior, or even equal article in the whole materia medica to aid in producing primary catharsis. I do not think much of this article in any other disease, only as an occasional adjuvant of other cathartics. But here it seems to have a peculiar *applicability* to the disease. And here it is not so apt to be thrown off the stomach as are other cathartics. In one stubborn case, after having freely used my syrup of *leptandria*, I gave, at different doses, *over a quart of oil* before I got up an action. Most patients have a great repugnance to oil. This is its only bad feature in this disease. To modify its taste somewhat, you may give it in warm coffee, in spirits or vinegar. Drop your oil into the midst of the fluid used, and it will be suspended in the fluid, and may be thus taken without much disgust. Better still: mix your *oil* and *sweet milk*, about half and half, bring to a boil slowly, and remove immediately; sweeten with *loaf sugar*, and you have a very pleasant medicine, without injuring the cathartic properties of the oil.

ENEMATA.—Now, if your *syrup* and *oil* should not operate soon enough, aid by large *enemas* frequently repeated. For this enema you may use the following:

R Common salt one table spoonful, common cane molasses one gill, castor oil one ounce. Dissolve the salt in one half pint warm water, and then add your molasses and oil.

In the excepted case I gave the *Leptandria*, and in all other respects the treatment was the same, and this was followed by the same results.

PEDELUVIA.—Warm foot baths should be given; after which warmth and moisture should be constantly had to the feet.

SPONGE BATHS.—Warm sponge baths should be applied every four or five hours, accompanied with considerable friction, being careful to maintain the external temperature, or even to raise it; for this is almost always deficient.

MILD CHOLOGOGUES.—After vomiting has been arrested, constipation broken up, then alterative doses of *podophyllin* and *leptandria* rolled into pills in the *ex: taraxicii*, may be taken three or four times per day. This, together with good diet, brandy and wine, is all the treatment required. You need not *now* be afraid of your *podolphyllin* in alterative doses; but, before this condition is obtained, interdict with all the authority of the sultan, jalap, gamboge, scammony and all such drastic agents, unless modified by other agents.

To effect the first and thorough evacuation, you may use our *anti-bilious physic*. I should prefer in this case the concentrated agents to the crude. The *concentrated fluid extract* of the above would be a more eligible preparation, and would be much more likely to be retained upon the stomach. You may obtain the *formula* and doses of both from the "E. Dispensatory."

This, gentlemen, has been the outline of my treatment in this disease, and with uniform success. That there are other agents that may do as well, or even better, is admitted. I have given you my practice and success.

There is, however, one thing which I forgot to speak about, and without which no practice would be successful. There is a constant, urgent persistent demand for water. Beware *how* and *when* you grant these demands. To hear them you must, if you have feeling, and do all in your power to satisfy this demand without endangering the life of your patient. All fluids in any considerable amount, will be immediately thrown off the stomach. Water cannot and will not stay upon the stomach in any quantities. After the commencement of your cathartic course you must interdict it only in very small sips and as *cold* as possible. Thus may you gratify your patient, and at the same time do no harm. Better still, are small bits of *ice* held in the mouth till dissolved, and then swallowed.

Let your patient know that *your* will is law, and see that the

nurse enforce it. Be not a tool in the hands of the friends of your patient. They will be constantly suggesting this, that and the other, should be done; that doctor such an one did so and so, and that, therefore, you should. Make up your mind thoroughly *what* should be done *before* doing anything, issue your commands accordingly, and, this done, let them know that you are "some pumpkins!"

DYSENTERY, COLITIS, COLO-RECTITUS. BLOODY FLUX.

The disease under consideration consists of inflammation of the mucous membrane of the rectum and colon, accompanied with frequent evacuations, small in quantity, containing either mucus or blood, and attended with griping pains in the abdomen, tenesmus and straining or bearing down at each evacuation.

The disease at times makes its appearance preceded by premonitory symptoms, and is characterized by general uneasiness, debility, want of appetite, or partially so, pains in the abdomen which may be dull or transient, accompanied with either diarrhea or constipation. In others the local and general symptoms appear simultaneously, when the patient complains of feeling chilly at the very time he experiences pain and tenesmus. The fever may precede, as it does in some instances, and occasionally for a considerable length of time, before any evidence of derangement of the bowels is recognized.

The symptoms, of a mild case, which attract the attention of an observer, are griping pains in the abdomen, which are quite irregular both in their periods of recurrence and position, and are attended with evacuations from the bowels that for a short time procure relief. Soon afterwards, however, is experienced uneasiness in the rectum, a sensation of heat, an inclination to bear down, at the same time a desire to go to stool; yet, little or nothing is passed at each attempt but mucus or blood. In course of time, the feeling of tenesmus is increased, and in some instances it becomes one of the most striking, and to the patient, one of the most troublesome symptoms connected with the case, and

at this stage it is by no means uncommon for the abdominal pains to center about the rectum, when the calls to stool become frequent and almost incessant. The discharges often bring about cutting pains, which become so intolerable that the patient dreads going to stool, in consequence of which the time is frequently prolonged to the very last moment. The evacuations are in some instances very frequent, not less than a dozen during the day, and are sometimes increased to three or four times that number. After the first or second evacuation, which contains more or less fecal matter, the stools become very small, streaked with blood, and contain more or less mucus, or, they may be nearly all blood, or nearly all mucus. As the disease advances, it is not uncommon to observe a small quantity of vitiated bile or shreds of false membrane intermixed with small quantities of coagulated matter; and in some instances small hardened lumps of fecal matter called *scybalæ* are discharged, though these are by no means very frequent, not near so, as some authors would make us believe. In the early stage of the disease, the discharges have little or no smell, but gradually become more and more offensive, the odor of which is so peculiar that it is very early recognized from feculent matter. It is by no means uncommon to find the bladder and urethra sympathise with the the local malady of the rectum, when micturition is added to the other symptoms, and in females the vagina participates to a greater or less extent. The pain in the abdomen is so acute that the extent of the inflammation can be distinctly traced along the colon by gentle pressure with the hand.

In all but very mild cases there will be found fever and its accompanying symptoms. The pulse more frequent than natural, and usually full and forcible, the skin warm and dry, in others covered with a clammy perspiration, the urine scanty and high colored, tongue moist and covered with a whitish fur. The secretion of bile is always diminished in quantity and vitiated in quality. It is the object of the writer to present dysentery in these few remarks in its milder form, as it has appeared to him during the season now rapidly drawing to a close, without dilating on the symptoms peculiar to any one case, but presenting them as an aggregate of the whole. Isolated cases are not always the most instructive to the practical man, or the inexperi-

enced, because they may present in some of their features peculiarities which may not be met with during a life time, or if met with at all, but seldom. Though it should not be understood that special cases are of no interest, but on the contrary, may be of inestimable value to many, if not all the members of the profession. Hence I shall not introduce the different varieties of this disease; though important in themselves, would nevertheless be out of place in this short treatise.

ANATOMICAL CHARACTERS.—In all cases of dysentery, the rectum, and frequently the inferior portion of the colon, presents the unmistakable signs of inflammation. The mucous membrane is reddened, and almost always thickened, and in graver cases ulcerated. It is stated that ulcers are more frequently found in this disease than in any other, except typhoid fever and small-pox. They are found either small, round and isolated, or large and irregular, from the smaller running together. They usually have an abrupt margin, and are covered with a thin coating of coagulable lymph upon the removal of which the mucous membrane is found red and swollen.

CAUSES.—One of the most common predisposing causes of dysentery is continued heat, which increases the excitability of the mucous membrane that lines the alimentary canal, deranging the function of the liver, relaxing the common integument of the body, thereby increasing the susceptibility to atmospheric changes. One of the most common of the exciting causes, and one of the most prolific, is cold when combined with moisture. Hence the frequency of its occurrence among persons exposed during the day to the hot rays of a noon-day sun, especially when followed by cold damp nights, in consequence of which, the secretion carried on during the day by the skin is suspended, and the excitement forced to take an inward course. The secretion of the liver is at the same time partly, if not completely, suspended. The consequence in both cases is congestion of the vessels of the mucous membrane in the former, and the portal system in the latter. Substances having an irritant action on the bowels, are fruitful causes of dysentery. Among them may be enumerated crude and unripe fruit, if taken in immoderate quantities; vegetables which are either partially indigestible, or insoluble on the stomach; unwholesome and indigestible food

of all kinds ; acids and imperfectly fermented alcoholic drinks, particularly such as the weaker wines, cider and malt liquor ; impure water, worms, feculent and other accumulations in the small intestines.

TREATMENT.—It is a fact well known to the profession that different modes of treatment have at times, and under dissimilar circumstances, proven successful. This fact gives rise to the rational inquiry, how can it be possible that a disease involving the same tissue and located in the same part of the alimentary tube, can be successfully treated by modes of medication dissimilar in many of their most essential features, which characterize a rational and scientific mode based on sound pathology.? If we call to mind for a moment the necessity of modifying our treatment, so as to fulfil the indications of each case, which must correspond with the degree of severity, the peculiarities of the system, and the great diversities arising from associated affiliations, and the problem before us is solved. The same principle involved in the treatment of this disease, is to a very great extent involved in every other which flesh is heir to.

Nearly every case brought to my notice the present season, has readily yielded to a simple though efficient mode of treatment.

Having in view the peculiar engorged state of the viscera connected with the duodenum, the distended condition of the small intestines with fecal matter, and our indications are clear and unmistakable. The removal of the accumulations in the small intestines is the first indication to be fulfilled, to which our efforts ought to be directed. To fill this indication we are in possession of nothing superior to our common antibillious powders, composed of jalap, senna and cloves ; taken in the quantity of a drachm, for an adult, mixed with sweetened water. Ordinarily, this quantity will produce several copious evacuations of fecal matter. This, too, in cases that might be supposed to have no fecal matter retained in the bowels that required a cathartic for its removal, for the reason, that little or no food of any kind had been taken for days, and perhaps troubled with a diarrhœa during all that time. Nevertheless, in all cases, not an exception, large quantities of fecal matter have been brought away to the astonishment of both patient and friends. The ad-

vantage we claim for this medicine over many others in the treatment of this disease, is in its specific action on the upper portion of the alimentary canal, producing in a short time an action of the bowels, which is followed by several more, and its power is spent mainly on the very part of the tube required, being both mild and prompt in its action. It is this compound that Dr. Morrow was in the habit of dilating largely upon in the treatment of dysentery, as well as many other diseases in which an active, efficient, mild cathartic was indicated. It removes the accumulations in the bowels, and relieves the engorgements of the vessels, both of which are indications of importance to be fulfilled. In numerous cases a repetition of the powders has been found necessary. In but few only has anything additional been required. A liquid extract of the antibilious powders is prepared, and for sale at several drug stores in this city, and it is supposed by many persons to be equal to the powders in mildness and efficiency; being in a concentrated form, is consequently more acceptable to the patient.

In those cases requiring additional treatment, the following pill was used:

Podophyllin, grs. j v; Leptandrin, grs. v i j; Sanguinarin, grs. i j; Extract of Taraxacum sufficient to make into pill mass, and to be divided into eight pills. One of which should be taken from two to three or more times a day, according to the indications.

Attention to diet is no small matter in the treatment of the disease under consideration. During the early part of the treatment the less food the patient takes the better. In all cases, if any be taken, it should be of the lightest kind, and very small in quantity.

The local applications have been as simple as the constitutional treatment. They consisted mainly of mustard cataplasms applied to the abdomen, followed by cloths dipped in hot medicated water, or hot water alone, and wrung till the greater portion of the water had escaped, and were changed frequently, and continued till the pain subsided. Enemas have been but seldom used, because the disease with the treatment instituted, has been easily subdued. Should the disease assume a more malignant

type, it might become necessary to use enemas both frequently and freely.

In treating children suffering with this complaint, the powders heretofore referred to, have been used, but in much smaller quantities, to correspond with the age of the patient. As a substitute for the pill, a liquid compound in many respects more suitable, as well as being more palatable, has been relied upon, consisting of Neutralizing Extract, \mathfrak{z} i j; Tincture of Leptandra Virginica, \mathfrak{z} j. Mix. The dose varies from half a teaspoonful to a dessert spoonful, three times a day, or oftener, according to the age of the patient. W.

✓ CONGESTIVE OR PERNICIOUS FEVER COMPARED WITH BILIOUS REMITTENT FEVER.

As Congestive Fever is of frequent occurrence in the south and west, it is of the utmost importance to the practitioner of medicine located in either section of the country, to be able to recognise and distinguish it from the ordinary forms of miasmatic fever, also common to the same districts of country; because, in many instances, the very existence of his patient depends upon a clear and accurate diagnosis, to enable him to institute at an early day a mode of treatment appropriate to the case, which must be energetic in order to save his patient; though it may not be absolutely necessary in the ordinary forms of bilious remittent fever. When fully formed, the type can not well be mistaken for any other by the practitioner, if he be familiar with the symptoms both in its simple and complicated forms. In the course of a bilious remittent case, symptoms of congestion may appear and yield perhaps, for a time, to the ordinary remedies relied upon in such cases. After which, it may unfold its true character, when to the surprise and mortification of the attending physician, in place of the improvement being permanent as was expected it would be, it is but transient, and the patient once thought to be out of danger, is now the subject of a more vigorous onset, and perhaps at a time when least expected, if at all, and in an unguarded state of the defences, may prove irresistible.

In the intermittent form of the attack, it is not unfrequent for the paroxysm to pass off without presenting anything remarkable or unfavorable, calculated to alarm the attending physician. Not anticipating serious consequences in the second paroxysm, he neglects a favorable opportunity in the first to resort to such means as the severity of the case required. It is, therefore, highly important to be able to recognize at an early day the symptoms indicative of this form of fever. Having this object in view, the following parallel is drawn between the two diseases under consideration:

CONGESTIVE FEVER.

1st. The countenance has a dusky or palid hue; the features sharp and sunken; the eyes appear deep in their sockets; the lips and nose have a bluish appearance; the general expression of the face is striking and uncommon.

2d. The skin is pale and cold; in the worst forms has a leaden or livid hue; eyelids and nails of a dark dingy blue; the skin moist and covered with a cold clammy perspiration, which sometimes stands in large drops on the surface.

3d. The pulse is small, full and frequent, varying from 120 to 160 beats a minute; it is sometimes so frequent and feeble that it can scarcely be counted.

4th. The tongue is pale and moist; in the very worst cases it may be found of a livid color; the breath is almost always of a deathlike coldness.

5th. The skin of the extremities is cold and of a livid hue, and moist; the vessels congest-

BILIOUS REMITTENT FEVER.

1st. The countenance is flushed; the face full and round; the lips red; the eyes suffused and glistening; the general expression dull and stupid.

2d. The skin is hot and dry; the surface reddened and full; this condition continues for several hours, after which a warm perspiration follows, first on the face and neck, then on every part of the body.

3d. The pulse is never so frequent as in the congestive form; running down as low as 90, and but seldom reaching 116 beats a minute; it is increased in fullness, and often in force; in general it is open and well developed.

4th. The tongue is almost always covered with a whitish or yellowish coating; in bad cases it becomes dry and parched; as the disease advances it assumes a dark brown or blackish hue; sometimes chapped or fissured.

5th. The skin on the limbs is warm; even the ends of the toes feel hot to the touch.

ed; the peculiar wet, cold sensation communicated to the hand is well calculated to make an indelible impression on the mind.

6th. Congestive fever is principally confined to the old residents, and to persons between 20 and 50 years of age; but seldom found at an earlier or later period in life; in the south the stranger is generally exempt.

7th. The patient complains of being hot, and begs to be fanned; complains of great heat, while to the touch of another his person feels wet and cold.

8th. It is said that bilious discharges are uncommon if they ever appear in congestive fever.

9th. An increase of heat and the drying of the skin are looked upon as favorable symptoms.

6th. Bilious remittent fever is confined to no class, age or condition, but attacks all indiscriminately; the emigrant is particularly liable to its ravages, if exposed.

7th. The patient complains of feeling cold or chilly when he either moves himself or clothing; while to the touch he feels dry and hot.

8th. Bilious discharges are common to all stages of bilious fever, though the bile appears unhealthy and vitiated.

9th. When the tongue becomes moist, the skin cooler, and the body covered with a warm perspiration, a favorable termination of the case may be anticipated. W.

CHEMISTRY OF FOOD.

In order to understand the composition of such bodies as are adapted to the nourishment of living beings, it is necessary that we should have some acquaintance with the rudiments of the science of Chemistry. As introductory, then, to our subject, we shall notice such of the principles upon which that science is based, as may be required to enable those whose acquaintance with it is limited, to comprehend the terms which we shall necessarily employ.

All such bodies as chemists have hitherto been unable to separate into simpler forms of matter are called *Simple Bodies* or *Chemical Elements*.

The uncultivated observer, judging from the almost infinite

variety of forms assumed by natural objects, would be very likely to conclude that the number of these elements of matter, or simple bodies, must be very great. This is not the case. At most it does not exceed sixty-three, and it is usually set down at fifty-five or fifty-six. The great mass of matter around us is composed of not more than fifteen or twenty of these, while the remainder are comparatively rare, and most of them known only to the professional chemist.

In the books, chemical elements are represented by symbols composed of one or two letters, usually the first, or the first and second of the name of the element. The following, which comprise all those found in organic compounds, may serve as an illustration:

ELEMENT.	SYMBOL.	EQUIVALENT.	
1 Carbon,	C	6	It will be observed that Potassium, Sodium, Iron and Copper, have symbols that do not correspond to their English names. The same is true of Gold, Silver, Lead, and several others not included in this list. The reason is that the Latin names of most of the metals known to the ancients, are used in forming the symbols. Thus, the symbol for Potassium is derived from Kalium, a word derived from Kali, the Arabic name for potash. Sodium takes its symbol from Natrium, Iron from Ferrum, and Copper from Cuprum, the Latin names of these metals.
2 Hydrogen,	H	1	
3 Oxygen,	O	8	
4 Nitrogen,	N	14	
5 Phosphorus,	P	31	
6 Sulphur,	S	16	
7 Silicon,	Si	22	
8 Chlorine,	Cl	35	
9 Iodine,	I	126	
10 Bromine,	Br	78	
11 Fluorine,	F	19	
12 Potassium,	K	39	
13 Sodium,	Na	23	
14 Calcium,	Ca	20	
15 Magnesium,	Mg	13	
16 Iron,	Fe	27	
17 Manganese,	Mn	28	
18 Aluminum,	Al	14	
19 Copper,	Cu	32	

The use of symbols greatly facilitates the labor of writing out chemical formulæ, and enables the student to understand at a glance what would otherwise require much more time and study. Take for example a familiar compound, Acetate of potash. It is composed of four elements, Carbon, Hydrogen, Potassium and Oxygen, and is represented by the formula $C_4 H_3 K O$. The figures at the right hand of the symbols refer to and multiply the combining proportions or equivalents, as they are called. In the table above, the numbers representing these will

be found to the right of their respective elements. All chemical agents are disposed to unite with others in definite proportions only. Hydrogen and Oxygen unite to form water, in the proportion of one part by weight of the former to eight parts of the latter. Hydrogen also forms a compound with Carbon in which one part of the former unites with six of the latter. Now, taking Hydrogen as the standard, and one as its equivalent or combining proportion, the equivalent of Oxygen is eight and that of Carbon six, and a combination of these agents will always observe these proportions, or simple multiples of them. The symbol C O indicates a union with six parts of Carbon, with eight of Oxygen: while C O_2 , (Carbonic acid) is composed of Carbon six and Oxygen sixteen parts.

When Oxygen unites with other elements, the compounds are called oxides. Many of the higher oxides possess acid properties, and the name of Oxygen does not enter into that of the acid compound. The formula C O represents the Oxide of Carbon (Carbonic Oxide). C O_2 being an acid, is called Carbonic acid.

When combinations are formed in several different proportions, prefixes are used to indicate the various degrees of oxidation. Proto indicates one, bi, two, and tri, three equivalents. Fe O , Fe O_2 , and Fe O_3 , are the symbols for protoxide, binoxide, and tritoxide of iron. The latter is an acid compound known as Ferric Acid. When two equivalents of one element combine with three of another, a sesqui compound is formed. $\text{Fe}_2 \text{O}_3$, is sesqui, oxide of Iron, and $\text{Cu}_3 \text{O}_2$, is subsesqui, oxide of Copper. When several different acid combinations of the same agents are formed, the degree of oxidation is indicated by a change in the termination of the name of the acid. That which contains the highest proportion of Oxygen is made to terminate in *ic*, while the next below changes this to *ous*. A still lower compound may be indicated by this latter termination, and the prefix *hypo*. N O_3 , N O_4 and N O_5 , are the symbols for hyponitrous, nitrous and nitric acids. Sometimes when a name has been appropriated, terminating in *ic*, an acid containing more Oxygen is discovered, and in such a case the prefix *per*, or *hyper* is used. Thus, Cl O_5 is Chloric, and Cl O_7 per Chloric or Hyper Chloric acid.

When an acid and an alkali combine, the result is a salt, and the

name is formed by uniting the name of the acid with that of the base or alkalic. The termination *ic* in the acid becomes *ate*, and *ous* becomes *ite*, in the salt. When prefixes are used in the acid, they are retained in the salt. The alkali or base is generally an oxide. K O N O_5 , is nitrate, K O N O_4 , is nitrate, and K O N O_3 hypo-nitrate of potash.

When other elements combine forming acid compounds, the name is formed from that of the two agents combined. H Cl , H Br and H F , indicate hydro-chloric, hydro-bromic and hydro-fluoric acids. When such combinations possess no acid properties, the names are formed like those of the oxides. C Cl , Na Cl and K Cl are read, Chloride of Carbon, Chloride of Sodium, and Chloride of Potassium. In like manner Bromine forms bromides, Iodine forms iodides, etc. The termination, *uret*, was formerly used for the compounds of several of the elements, as Sulphuret, Phosphuret, etc., but these, like the others, are now usually made to terminate in *ide*. Several of the combinations of simple bodies, containing neither acids or alkalis, are recognized as salts. Chloride of Sodium (common salt) is a familiar example.

Chemistry is divided into two departments, based upon the nature of the subjects of which it treats. *Inorganic Chemistry* comprehends as its field of investigation, all those objects which belong to the mineral kingdom. *Organic Chemistry* considers the structure and properties of the animal and vegetable kingdoms, or all that class of substances possessing organic life, including those compounds which result from the decomposition of organic bodies.

Organic compounds are usually much more highly complicated than inorganic ones, and their decomposition takes place with a corresponding degree of facility.

G.

[To be Continued.]

CLINICS IN THE COMMERCIAL HOSPITAL.

During the last month the clinics in the above institution have been more than usually attractive. The medical department has furnished more than a supply of rare and highly interesting cases, illustrative of the numerous maladies incident to this section of country. Many of which have been ably presented, the symptoms indicative of each case pointed out, and the mode of diagnosing one disease from another, with which it is somewhat allied, clearly and instructively explained; furnishing to the students in attendance a fund of practical and useful information, in this important department of medical science, but seldom met with. Among the numerous cases which have attracted our attention, may be mentioned rheumatism, a disease, the pathology of which is but imperfectly understood. Hence the different modes of medication which have been from time to time presented to the profession, each one having claims superior to all others in the estimation of its advocates. In the opinion of Dr. Graham, the disease mainly, if not entirely, depends on an acid in the system, to neutralize which, alkalies are used by him, and with success. One important fact in connection with the treatment, as reported by the Doctor, is, that heart complications have never supervened in any case that has been under his charge, an important feature to the practical man. Two drachms of Rochelle salt he recommends to be taken at a time, in solution, to be repeated three times a day and continued till the urine becomes neutral or alkaline; the dose to be increased or diminished as circumstances indicate, after which, if necessary, hydriodate of potassa, or colchicum, may be used at the discretion of the physician.

A very interesting case of organic disease of the heart, has been presented, and the mode of diagnosing one change from another involving either the valves, aorta, pulmonary veins, membrane, or the substance of the heart, were discussed, and the various sounds explained in an able and well arranged lecture by Dr. Lawson, since which, the same has been presented by Dr. Graham, and his mode of treatment in such cases presented in a few appropriate remarks. The agent on which he relies, and in which he places great confidence in treating organic changes of the organ under consideration, is *veratrum viride*, which ought to be continued for a long time to be of any

use, and of sufficient quantity to reduce the pulsations to fifty or sixty a minute, or even lower, if required. This treatment is instituted with a view to relieve the organ involved of a portion of its labor, on the principle that the more an organ is used, the more blood it requires to sustain it; the less duty it has to perform, the less blood will be required to circulate through it. As a consequence, in place of increasing the size of the organ by dilatation, or morbid growth, in any part of it, or its vessels; by relieving it of a portion of its accustomed duty, for the reason expressed above, we may reasonably anticipate an approximation to its natural or normal dimensions.

Numerous cases of interest have been presented, both in the medical and surgical departments, which are full of interest, and are as much deserving of a notice as the two cases referred to above. But our space is too small to do more than merely allude to them at this time.

Phthisis pulmonalis, the scourge of civilized society, has been discussed, its rise, progress, and ravages elaborately and clearly presented, which we propose to notice at some future period.

To-day, the 17th of October, one of the most important surgical operations has been performed for tumor of the neck, it has been our lot to witness. The patient, a native of Wales, between fifty and sixty years of age, large size, robust, and to all appearances in good health, with a tumor on the right side of the neck, commencing at the ear and extending down to the clavicle, or nearly so, about ten inches in length and six in diameter, somewhat elongated, and of a blueish color, with an ulcer in the middle of the depending portion. It is about twenty years since it made its first appearance. Until lately, however, its growth was slow, attended with but little pain, which has increased with the growth of the tumor. Within the last few months it has increased rapidly, and unless extirpated, death appeared inevitable. The nature of the tumor is not known—supposed to be malignant.

The patient was placed upon the operating table, and a freezing mixture, consisting of ice and salt, applied to the tumor. Neither chloroform nor ether was administered, whether by the advice of the surgeon, or at the request of the patient, we are not informed. Dr. Blackman, the operator, made an incision on the outer side, and near the base of the tumor, extending length-

wise, and after the vessels wounded were ligated, he separated the immense mass with his fingers, and removed it bit by bit, till the greater portion had been taken away. During the operation, it became necessary to ligate a few of the arterial trunks, which were separated unavoidably by the removal of the fragmentary portions of the mass. The tumor extended into and involved the axillary plexus of nerves, the common carotid artery, the internal and external jugular veins, the trachea, pneumogastric nerve, and, in fact, all the structures adjacent, were invested more or less by the superabundant growth, rendering care and skill on the part of the operator indispensably necessary.

The mode instituted for its removal, rendered the operation tedious and protracted, occupying over an hour. The greater portion of the tumor was taken away by carefully manipulating, leaving a few small fragments in the deep-seated parts, which, in all probability, will slough away, being torn and separated one from another, so as to disconnect them as much as possible. The opinion was expressed, by the operating surgeon, that, in all probability, the isolated portions remaining, would slough off, in a short time, to facilitate which, he proposed to apply a freezing mixture. A quantity of lint was applied to the wound, and the integument drawn gently over it, after which, the patient was removed from the amphitheatre.

The next, and last case, was one of cancer of the penis. The patient, about forty or forty-five years of age. The organ, at a distance, had the appearance of a honey-comb, round in form, and some two and a half inches in diameter, with a peculiar cancer smell.

The surgeon ordered a freezing mixture to be applied locally to the parts involved. During its application, the patient was inhaling a mixture of ether and chloroform, three parts of the former to one of the latter. In a few minutes after the application of the mixture, knife in hand, the operator took hold of the penis, and in a minute the patient's organ was separated from the body, when three streams of blood were distinctly seen flowing from the stump. The organ, or what was left of it, was seized by the left hand of the operator, and with a pair of forceps in the other, each arterial trunk was picked up and ligated, till they were all secured, when the clinic for that day was brought to a close.

PERTUSSIS, OR WHOOPING-COUGH.

BY R. F. CLOVER, M. D.

MR. EDITOR:—As Whooping-Cough, in an epidemic form, has been raging more or less violently in this vicinity, for more than five months just past, and has visited almost every family, it has afforded me a fine opportunity of investigating the nature and character of the disease, and adopting a treatment which is as simple as it is successful. In consequence of which, I thought a short essay from me would not be unacceptable to the numerous readers of your valuable Journal.

It will not be necessary here to dilate upon the symptoms peculiar to each case, farther than to say that they were similar to those of former years. The malady was principally confined to children, though adults were not entirely exempt from its ravages. Neither was it wholly confined to those who had been exempt heretofore, but, on the contrary, attacked indiscriminately those who had been subjected to its ravages, as well as many who had never been under its influence.

There were quite a number of extremely bad cases during the season, to a great proportion of whom I was called. As it is considered by authorities to be a disease of self-limitation, their opinion has had its influence on the public, and induced many to rely on their own domestic remedies, which were considered as good, if not better, than the prescriptions of the profession. In consequence of which, the physician was not sent for until the case, or cases, had become somewhat alarming. I have seen many cases so bad, and the paroxysms of coughing return so frequently, and with such violence, as to almost prevent the little sufferers from sleeping during any portion of the night.

I am of the opinion that whooping-cough can be cut short by appropriate treatment. The nature of the disease is not fully understood. In this particular, I concur with Dr. I. G. Jones, who says, that "whooping-cough may, with great propriety, be classed among nervous affections, producing reflected irritation in the larynx far short of inflammatory action, as shown by the slight alteration from the natural condition of the parts."

TREATMENT.—In my opinion there are two indications to be fulfilled in the treatment. The first is to cleanse the air passages and stomach, more particularly in cases of children that frequently

swallow the tenacious mucus and phlegm, which is brought up by their whooping and coughing. The second is to relax and break up the spasmodic action of the larynx and contiguous parts. I have used in the treatment quite a number of the most popular remedies which have been relied upon by the profession. Such as ipecacuanha, asafœtida, carbonate of potassa, cochineal and alum; as well as several of their most popular combinations. They would all, more or less, palliate the disease for the time being. Not satisfied with mere palliation, however, I sought for something that would limit its duration. With this view I commenced to use the agents which I shall shortly mention, and in every case when the directions were carried out and the medicine taken, my success has been universal, embracing over a hundred cases.

To fulfil the first indication, especially in children, whose larynx and air passages were nearly closed with a tenacious phlegm, I gave enough of an acetous emetic to produce emesis. The dose, for a child, is from one half to a teaspoonful, to be repeated in ten or fifteen minutes. The formula for the acetous emetic is as follows :

℞ Pulverized Blood root, 3j ; Pulverized Lobelia Inflata, 3j ; Pulverized Skunk Cabbage, 3j ; Good hard Cider Vinegar, Oj ;

Macerate for fourteen days, filter, and it is then ready for use. Each dose may be given in a little sweetened water which renders the medicine more palatable.

As soon as the stomach is settled after the emetic, I then give the following compound, which is nearly or quite as specific. In the majority of cases it will be found to fulfil the two important indications most admirably, viz: relax the spasmodic action of the parts involved, and produce emesis.

℞ Tincture of Belladonna (Shaker's herb) 3ij ; Tincture, Lobelia Inflata, 3 iij ; Tincture Blood-root 3iij ; Essence of Gaultheria Procumbus, (Partudge berry.) 3j ; Simple Syrup, 3ij. Mix.

For a child from one fourth to a teaspoonful, once in three hours, to be continued till its specific effect is produced, viz: a flushed appearance of the face, and a slight dilation of the pupils. When either, or both, appear, the medicine should be discontinued for that day. From my own observations, I am led to conclude that it is better to manage the case in such a manner as to administer a dose on retiring to rest. By so doing, the cough

which otherwise would have been very troublesome during the night, but seldom annoyed the child so much as to prevent sleep, a condition very much to be desired. It has in every case, when the medicine was administered according to directions, broken up the peculiar whoop and cough in from six to thirty-six hours, leaving nothing but an ordinary cough as the sequel of the disease; which, by continuing the medicine from six to fifteen days longer, it gradually disappeared, till all signs of the disease vanished, and the child free from cough and its consequences, was once more restored to health. It will be observed that the medicine is to be continued daily until the patient is well. In addition, proper attention should be paid to diet. I have recommended the treatment here detailed to several members of the profession, who have met with equally good results with myself, since its introduction.

With regard to the numerous complications which so frequently accompany this disease, I have not now time or space to say more than that they should be treated according to the peculiarities presented in each case.

Marlboro, Ohio, Sept. 1856.

VALEDICTORY ADDRESS,

Before the Graduating Class of the American Medical College.—Winter Session of 1855-6.

BY J. R. CONE, M. D.

HONORED PROFESSORS, FELLOW GRADUATES AND STUDENTS:

BEING convened here for the last time, it becomes us as a medical class to pronounce a valedictory. It has fallen to my lot to perform that duty in behalf of the class.

In doing this, I invite your attention, First, To the American Medical College; Secondly, Our Professors; Thirdly, Fellow Graduates and Students; and Lastly, The Occasion.

Years by-gone, the first Medical School was established in the city of Philadelphia, whose principles and teachings, no doubt, were fully commensurate for the times, when the hardy constitutions of our progenitors, and their healthy modes of subsistence, rendered them suitable subjects for "Heroic Treatment." When men possessed full, or perhaps more, than one hundred and

twenty-seven red cells in every one thousand parts of life power, and danger could be apprehended from the multiplicity of these tiny life-boats ruining commerce by too brisk and cheap a transportation, the *Lancet* was called upon to *extract* some, *damage* others, and *debilitate* the remainder. Without beginning there never could exist any progress, nor accrue any useful results, and as such, a pioneer ever deserves our gratitude and remembrance. But the *necessity* for bold *Depletion* and scientific *Ptyalism*, has long since ceased. The material change in our modes of living, when compared with that of our ancestors, tends to render us an effeminate people, requiring and demanding a corresponding change in our medication.

The opportunities for the obtainment of medical knowledge, are within the reach of all possessed of moderate means and untiring perseverance.

Colleges are numerous, all aiming at the same great end, each inculcating principles claimed to be based upon sound *logic* and bona fide *reasoning*. To cure the *sick*, and render the journey of life pleasurable, by the removal of *thorns* along its pathway, and replant in their stead the blooming rose, constitute but a fractional enumeration of their high and holy intentions.

Many of these Colleges aim to accomplish this by still adhering to the old and beaten track; appearing determined to traverse the routine marked out by their illustrious and heroic predecessors, and he who turns aside to survey any new *track*, or lay a new *rail* for the more speedy arrival to the depot of pristine health, is occasionally denounced a base heretic, quack and empiric.

Another portion reject all agencies except *aqua pura*, adopting it to promote Emesis and Diaphoresis, and thus *swim* from apparent illness, or feigned squeamishness, into the haven of bliss and accustomed health.

Again, we behold another *sect* who protest against the use of all *extracts*, and contend that *Fever* is not disease, and *Death*, almost useless, when *Phytology* is comprehended, and the crude "*Yarb*" is properly administered—that he who formed man, likewise bedecked the *earth* with *herbs* sufficient for every ailment and affliction.

Through the thick mist of partisanship and rivalry, *another* denomination is perceptible, inscribing upon its flag "*Similia*

Similibus Curantar." Their agencies consist in *infinitesimal pills* properly attenuated, for the removal of all diseases; their chief success is to be attributed to the strict observance of the laws of *dietetics*, enjoined upon their *patients*, thus allowing *Nature* to perform her work most admirably. But if she proves unable to remove offending impactions, *Death* becomes inevitable and certain.

Again, a minute portion profess to cure by stimulus, adding fuel while the flickering lamp of life emits its feeble scintillations. But this sect, like the poor *Indian*, has nearly passed away, and are known only by their retreating footsteps, and remembered by their infatuated votaries.

Lo and behold! Another sect dawns, and aiming at the greatest good to the greatest number—burning for the promulgation of their peculiar principles—stimulated by the dazzling prospect for *honor*, *renown* and *emolument*, they have toiled on philanthropically—rearing their gigantic schemes and future anticipations upon the broad basis of ECLECTICISM—philosophers selecting such *theories* and *practices* from the sum total of *pathies* and *sects* as they deemed truly useful and rational. It was soon apparent that *much* was attached to a *name*, and that *Graduates* of this school *might* be debarred entrance into differing institutions, and often refused *counsel* merely on account of *name*.

The multifarious dogmas and creeds of all the foregoing, called loudly for the organization of another College, unlike all others in cognomen—*independent* in its teachings, and securely resting upon the *Platform* of true *Democracy*!

Such an institution we possess in the AMERICAN MEDICAL COLLEGE! A school, in which *all*, irrespective of opinion, *sect*, or *name*, can mutually assemble and unite their efforts in the inculcation of republican principles and tolerative instruction, and like the busy bee, kindly mingling with all—endeavoring to extract some *sweet* from each, and leave the *bitter* unmolested.

In these times of professional jargon and political factions, what more appropriate title could be produced? No higher encomium could be bestowed upon any *Alma Mater*, than the one assigned to our College. A *name* revered above all other names, by every patriot for more than three hundred and fifty years, and containing an area of nine thousand miles in length, and four thousand in width! A *name* which electrifies every

Hero, and nerves him on in the hour of conflict, to restore it untarnished, even at the expense of his heart's vital fluid! A *name* beloved by all and honored by foreign nations, whose excelsior flag waves o'er its vast area, from center to periphery; caressed by all, molested by none.

'Tis a *name* which can but awaken every *Graduate* of this College, to the performance of his every duty throughout the period of his professional career.

It should cheer him on amid the dreary moments and irksome toils of his calling, ever remembering that the *name* inscribed upon his *Diploma*, for which he has spent years of anxiety and days of studious research, was obtained and preserved by the *blood* of our forefathers.

The design of this school is, to allay all discord, and treat the whole human family with due respect; to establish its own liberal views—propound them freely, and submit them to the fiery ordeal of experience, and leave it for the intelligent and thinking mind to adjudge of their correctness or fallacy. It aims to accomplish this manfully and scientifically. Its purpose is, to *select* from the most voluminous *Materia Medica* extant, those agents known to be reliable *curatives*, and to *reject* those known to be deleterious upon the animal economy—to glean from the numerous works upon *Practice*, the latest, most efficacious, simple and reliable. Its design is to *care* for the *lives* and *health* of our fellow-beings, and proffers to do this by the administration of curatives calculated to assist *Nature*, and avoid all known “disease-creating remedies.”

In all the varied branches of our profession, it *sifts* the writings of the most reputable authors upon *Pathology*, *Therapeutics* and *Practice*, dividing the useful from the pernicious—the wheat from the chaff.

It desires to assuage all factional commotions among professionalists, and adopt the *Golden Rule* in all transactions. It enforces the vast importance of cautiousness and forethought in the healing art, and of eradicating all selfish and narrow-contracted conceptions—ridding the student's mind of the dull monotony of routine, and assuming the prerogative to *think* and *act* for himself—to leave his mind untrammelled, bound to no absurd *hobbies*, nor shackled by the galling *fetters* of superstition or jealousy.

The purpose of the *American* is a noble one, and well worthy its erudite board of trustees, honored professors, and the attention of the thinking and philanthropic portion of the public. Its opportunities and purposes commend it favorably to all, as being second to none and equalled by few. It endeavors to quicken the perception and awaken a spirit of useful research in the minds of its disciples, and not swallow the ipse dixits of any author, without proof and trial. The students of this College are favored with all the Hospital and other advantages extended to any Medical School, and its Museum exhibits rare specimens of disease.

With such facilities, the American can but accomplish its purpose truly and honorably. Thus far it has fully met the expectations of the most sanguine, and though young in years, is strong in *faith* and *influence*. Each session exhibits a large increase in its number of matriculants, and adds new laurels to its undying fame.

Already its Graduates are in various sections of our globe, who are manfully practising upon the great principles here inculcated, with a zeal and success heretofore unknown. They have gone forth upon the vast ocean of trial and opposition—guiding their tiny bark by the compass of cautious reflection and discrimination—the missiles of all opponents are warded off, and they glide o’er the dangerous breakers, and finally *emerge* amid the echoes of those who have been made to realize the efficacy and potency of their selective treatment.

Yellow Aurum and shining Argentum illy repay those who instruct us, and is a meagre recompense for medical knowledge. But, methinks, could our Professors fully appreciate the warm feelings and increasing flow of gratitude felt and expressed by the scores of Graduates who have borne off the prized *Diploma*, and the class who are now assembled in College Hall for the last time, they would feel partially, if not wholly, repaid for their untiring toil and assiduous efforts.

Our institution is Republican! Its *doors* are open to *all*, without regard to *party*, *sect*, or *denomination*. *All* are kindly solicited to come and partake of its bounteous privileges. Its *fees* are small, and course of *Lectures* extensive and thorough. Here the student is made to feel himself at home, though removed hun-

dreds of miles from the enchantments which cluster around the domestic fireside; he is cheered by the affable deportment of Professors, being cared for and instructed in *health*, and should disease deprive him from attending Lectures, he becomes still more an object of attention and receptacle of kindness.

HONORED PROFESSORS: It devolves upon me in behalf of the class to express our heart-felt *thanks* for your useful advice and experienced instructions. Long may you live to wield your colossal influence in favor of unity of feeling, and for *Medical Reform*. Persevere in your laudable project, *success* is yours. The most careless observer cannot fail to behold the dawn of promise which bespeaks your future prosperity. *Truth is mighty; it must prevail*. Go on, then, I beseech you, until our continent is o'er-dotted with thinking practitioners, who look to the *cause* of disease, and base their treatment upon philosophy.

The field of *Reform* still needs much culture; noxious weeds are germinating, and require constant attention. Rest not till all *tares* are consumed by *fire* unquenchable, and *victory* perches upon your standard. Then shall countless numbers rise up and call you blessed.

It fills the *heart* to o'erflowing to realize the *fact* that we meet in this College Hall for the last time, and it being enjoined upon me to pronounce that sad word — Farewell. There ever exists a strong affinity between Teacher and Pupil — a Professor and Student. Time fails to eradicate such impressions and lovely reminiscences.

Then, gentlemen Professors, though we separate, yet shall you be remembered while reason reigns and memory occupies her throne. I perceive that some of you begin to exhibit locks silvered o'er with age. The prime of your life has been spent for the amelioration and elevation of our profession. We feel under great obligations to you for such noble sacrifice and commendable industry. We hope to prove ourselves worthy recipients, and preservers of the same. We convened here for the first time as strangers; we separate as *brothers*, bound together by common ties, and united in a common and philanthropic cause.

Gentlemen: As the union of rivulets form the majestic river, whose mighty current admits of no barrier to its onward and still

onward career, so will we combine our efforts in assisting you in your future career and labors for good. We feel the most earnest aspirations for your future welfare and happiness, and pledge our manly co-operation in every laudable undertaking.

Shall we ever *forget* the continuous zeal and unflinching assiduity of our Professors? Shall those vivid lectures upon all the branches of our profession ever be effaced from the tablet of memory? No, no. It cannot be. Those imprints are indelible; they can never, *never* be *forgotten*.

Gentlemen, Time, with its never-ceasing evolutions, may continue till *death* finally marks you as its victim, and though your grave remain as does that of Professor Morrow's — *tombless!* no insignia to betoken whose dust moulders beneath, yet shall you have an undying monument, containing an appropriate epitaph, erected and planted *deep* in the minds of the class now about to disperse.

Honored Professors, and may your lives yet be long and still useful; may Heaven shed its choicest blessings upon your pathway, and your last moments be your happiest. Farewell! Farewell!

FELLOW GRADUATES AND STUDENTS: In our vocation, the young and energetic inquirer has every facility in this country for being learned, useful and eminent in his profession. We need but to cast our regards to our Professors, to perceive *men* who have attained the highest positions without ever having left our loved American shores. May we highly esteem the advantages we possess at *home*, for the successful prosecution of our profession, and at the same time be ever on the alert to draw in from foreign sources, whatever may add to the richness of our accumulation.

Some who are about to go forth from this College Hall, are in the very heyday of youth and hot blood, intending to devote their whole life and faculties to the exclusive calling of ministering to the care of the sick and the wounded.

'Tis seldom, indeed, that we resort to the sick chamber in pursuit of happiness, as the sick and afflicted are, by no means, the most agreeable companions — being usually tyrannical, dissatisfied, fretful, and exigent of all possible services and regard; and yet, it is among these we are doomed to pass the major part of

our lives. Can happiness be extracted even here? Yes, it can; perhaps not in the *fact*, but in the *principle*. In the *good* we do; in the *pride* of our opinion, which rules and reigns in the most awful circumstances.

Our vocation is to continuous acts of pity, sympathy and charity, for there is nothing more pitiful, in my humble judgment, than the condition of a human being when, in the act of laying down his life on the bed of disease and incurable pain, he unrolls to cast off forever this mortal coil, and go forth into that realm from "whose bourne no traveler e'er returns." 'Tis painful to witness the countenances of the dying, and follow those changes of psychical and corporeal expression, that we understand to signify the *agony* of death.

Fellow Graduates and Students, it is our business to be sympathizing, humane, indiscriminating in charitable acts and sentiments—extending relief to all who demand our aid, without respect of persons or conditions. Our beneficence, like the early and latter rain, should descend alike upon all, freely.

What would society do without its physicians, and imagine that in every country beneath the sun, every item of medical and domestic knowledge of the *appearances* of disease, and the *powers* of medicines, could be blotted out and cancelled in the minds of men!

What *horror* at the next hemorrhage!—what *panic* at the spectacle of a gaping wound, and its madly rushing blood—what *affright*, when convulsions should torture, and rend, and deform the frame—what futile hopelessness in fractures and luxations,—what confusion and dismay at the outburst of pestilences.

I contend that society could not exist in civilization without physicians. Men would not march to battle, nor defend their towns and cities, if unguarded and not stimulated by their faithful surgeons and doctors. The medical staff of the army and navy are equally indispensable as the gun, the bayonet and the bullet.

According to the last census returns, forty-four thousand men are engaged in our vocation—a profession which might be considered as cyclical in its nature—having neither beginning, middle, nor end. It stops not nor stays for sabbath or holiday; day and night are alike in it; winter and summer, autumn and spring, afford no respite or quiet to the busy effort and round of trials devolving upon the practitioner.

Fellow Classmates: Sixteen weeks ago and we were wending our way to the "Queen City of the West"—to this revered temple of knowledge. We came here from nearly every state in our Union, as strangers, in pursuit of self-knowledge and salutary medication. We became acquainted, and only thus to highly *esteem* and assist each other, thus rendering the entire course one of profit and pleasure to all. It has been my fortune

to attend other *Institutions*, but for deportment, kindness and intelligence, I award the praise to you.

A beginning generally implies a termination. Many of you are intending to remain the ensuing session. May *peace* remain with and *prosperity* ever attend you.

Some of us having tugged on these many years, are about to launch forth to try our fortune upon the turbid waters of the professional sea. As to-morrow's sun peeps o'er the Eastern hills, we shall commit ourselves to the fulfilling influence of the iron-horse, to be borne, either to the snowy bank and icy fields of the NORTH, or to the beautiful clime of the sunny SOUTH — to the fruitful and far WEST, or to the golden EAST.

We have been honored by a Diploma issued by the only College bearing that soul-stirring and patriotic cognomen, America! May our present success be an index and synonyme of our future greatness and usefulness. May the fraternal example of our Professors attend us through life, and buoy us amid all temptations, to swerve not from the path of *Reform*, of rectitude and of right.

I regard a Diploma as being the great passport to future honor and distinction. But, fellow Graduates, if upon its reception we relax our efforts and research for medical intelligence, and become *indolent* and quiescent, instead of *advancing*, we shall *retrograde*, and thus bring *discredit* upon our *Alma Mater*, Professors and profession.

Time lost, is lost for eternity. Let us then, as we are about to separate for the last time, solemnly *promise* that we will study much and attentively, and never forget the plain reality that we are dealing with *life*, and that, as accountable beings, we are held amenable for our deeds at the Judgment bar.

'Tis the *sleeping* sentinel who allows entrance to the enemy, and thereby brings *ruin* upon a city — not the vigilant watchman who narrowly scans every manœuvre, and is prepared to report at a moment's warning. He who imagines that *indolence* and the *practice* of Surgery and Medicine possess any *stock* in common will find, alas too late, that he had formed an erroneous Diagnosis, and that mediocre, shame and remorse will constitute his Prognosis.

The main secret to success in any and all pursuits, consists in *trying*, always — *yielding*, never.

A Diploma is an oar, by the continuous application of which, and by the perusal of the latest and most accurate authors, we can safely row past the ensnarements which beset our career in the veiled future, and finally land upon the slippery shores of popularity, emolument and honor.

Go forth, beloved Graduates, with a determined *will* to *relieve* the afflicted, to *cure* the sick, to *bind* up the broken-hearted, and perform *all* duties timely, scientifically, and conscientiously.

But the perpetual vibration of time's onward march, admonishes me that I must close, for

Time by moments steals away,
First the hour and then the day,
Small the daily loss appears,
Yet how soon it amounts to years.

Already I fancy fond hearts and gushing vociferations of welcome, anxious countenances and eyes moistened with joy, await to greet you around the domestic and lovely circle of home. Go then, with these requests, that you often retire and think of those who have so graphically and scientifically taught us here. Dwell upon our pleasant College career, and oft review our cheerful associations, and then, by the aid of that useful instrument, the *pen*, let us converse with each other, tho' thousands of miles intervene.

Lastly, I request you all to be *punctual* in your *visits* to the sick, for *this* of itself, often proves of more *utility* than all the *nostrums*, *hobbies*, *formulas* and *Materia Medica* combined with *tardiness*. May long and useful lives be yours and happiness evermore.

Gentlemen and Ladies, your presence nerves us on to deeds of charity and the restoration of the sick. Accept our *thanks* for this token of approval and respect. Woman's influence, who can portray? Her very presence cheers us upon this occasion to the sacred fulfilment of our profession. Her smiles are like *oasis*' in the dreary desert — they nourish our drooping energies and beckon us on to exploits of noble daring. Deprived of woman, man would become a wretch indeed — careless of himself and reckless of all around him. The superb mansions and decorations of art which form our cities, would never have been constructed but for woman's presence and influence. Her *sphere* is the unceasing acts of *love*, to *deeds* of charity, to the inculcation of moral and religious sentiments, and to efforts of cheerful and lovely attentions around the fire-side of sweet home. Ladies, we ask your kindness and assistance, and in return, when sickness and pain assail you, we proffer you our counsel and professional skill.

Finally, honored Professors, Fellow Graduates and Students, all the works and desires of *men* end in *death* at last. May your exit be one from scenes of *toil*, *strifes* and *hardships*, to one of heavenly bliss unending! then, if not before, may you fully *realize* that he

Who blesses others in his daily deeds,
Will find the healing that his spirit needs,
For every *flower* in others pathway strown,
Confers its fragrant beauty on our own.

Adieu.

New York, Feb. 14, 1856.

T H E

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No. 4

PNEUMONIA.

The time is at hand when Pneumonia prevails. (more or less) in every part of our widely extended country ; and a few remarks, from one who has had much to do with it, may not be unacceptable. But, before entering upon its description and treatment, we wish to make a few remarks on the methods of treatment and cure pursued by many of our *reputed* reformers. Some of them phlebotomize, freely. More, wet cup ; and yet more, blister ; and a few—I am well informed—perform all three of these operations on some of their patients. In addition to all this, drastic cathartics are often exhibited. Will any one point out the difference between this and full-blown Allopathy? We think it would not be easy to do.

Many of the best informed and most experienced of our Allopathic brethren, have abandoned depletion entirely in this disease—particularly in Europe. Dr. R. B. Todd, F. R. S., &c., one of England's most noted physicians, a few years since made the following remarks in one of his clinics:—

“I will just observe, *in limine*, that the plan of treatment which I have pursued in cases now convalescent, as well as in many others, consists not in the use of remedies directly anti-phlogistic, (so called,) that is, of remedies intended directly *to knock down inflammation* by *withdrawing blood*, the *supposed* fuel of all inflammation, and by *reducing vital power*, but in the employment of means which will promote the free exercise of *certain excretory*

functions, by which the blood may be purified, and certain matters removed from the system, which, remaining in it, tend to *keep up a state* very favorable to inflammatory affections. The remedies to which I refer, tend to promote the free action of the skin and kidneys, and in a less degree that of the intestinal mucous membrane; whilst, at the same time, a free stimulation is maintained of that part of the skin which is the seat of the pulmonary inflammation; and an essential part of this treatment is, that whilst these remedies are being used, *we do not aim at reducing the general powers of the system*, but rather at *upholding them*, by such frequent supplies of nourishment, easy of assimilation, as may readily be appropriated; and, when necessary, even by the administration of stimulants—on this principle, that the free exercise of two such great excretions as come from the skin and kidneys, would, if fed only from the tissues and the blood (without the introduction of fresh supplies,) necessarily *weaken and exhaust the general powers of the patient to an extent inconsistent with the full exercise of the process of repair needed by the inflamed organ.*”

This is the *true* reformed doctrine, echoed back from England.

“Some physicians have drawn a distinction between cases of pneumonia, which is very useful with reference to treatment. There are, they say, two classes of cases of pneumonia; the one sthenic, the other asthenic and typhoid; the former capable of bearing the most active anti-phlogistic treatment, and for which *they say*, that that treatment is necessary; the latter requiring a *supporting, and even a stimulating plan*, and for which an anti-phlogistic treatment would be *extremely hazardous and dangerous*. Now, while I fully recognize and admit the great practical value of such a distinction as this, I must remark, that it seems to me that it ought to be expressed differently. I would say, that all cases of pneumonia have, independently of this or that mode of treatment, a decided tendency to *depress the general powers of life*—some more, some less; and that, with all, a very decided anti-phlogistic treatment is *hazardous*—with some extremely so—and that in none is it absolutely necessary; but with others there is *no safety for the patient*, unless the treatment, from the beginning, be of a decidedly supporting and stimulating character.”

“ You will note the distinction which I make between remedies *directly* and indirectly *anti-phlogistic*. The former is a class of remedies whose supposed efficacy is founded upon a notion (an erroneous one, as I think,) namely, that certain acute and sthenic inflammations are attended with an undue exaltation of the vital forces, both local and general, and that these must be depressed before the inflammation will yield. I say, I think this view erroneous; for while I would readily concede, that in pneumonia there is an exaltation of vital force at the inflamed part, it seems to me quite plain, from the clinical history of the malady, that the local inflammation draws so largely upon the rest of the system as *to depress the general powers of life*; else, whence the weakness, the loss of appetite, the wasting, which take place in the course of the disease, even when favorable, independently of any particular treatment?”

“The remedies indirectly anti-phlogistic are those by which it is professed to promote or exalt some particular functions, as sweating, or some other secretion, and thereby to *purify the blood*, by diminishing noxious matters through those channels, and by such purification of the blood, to reduce or remove febrile symptoms.” * * * *

“ The plan of treatment which has been recommended by some of our highest authorities, I need not tell you, is that of bleeding and tartar emetic. You bleed early from the arm, and, if necessary, you bleed a second or a third time; and if under this treatment resolution does not speedily take place, you bleed locally by leeches or by cupping, and likewise give tartar emetic more or less freely; to all which counter-irritation (blistering) may be added in the more advanced stages.”

“ I have had ample experience of this treatment; and, I must confess, that that experience has so little satisfied me with it, that I have for some years ceased to adopt it; for under this treatment, *I have seen too many die*; and when recovery has taken place, in too many instances it has been *attended, lengthened convalescence*. Indeed, of all the fatal cases which it has fallen to my lot to witness, the great majority have been treated in this way: and in most of them, anti-phlogistic treatment had not been carried to an excessive or unreasonable extent.”

* * “ Under this treatment, [speaking of his own plan] deaths from pneumonia have been extremely rare among my cases. The fatal cases are those of patients who come in far advanced in the disease, or in whom the disease has rapidly invaded a large surface of one or both lungs; but even such cases often do well under this treatment, combined with support and stimulants. In all cases, I am careful to give support from the first, in the shape of animal broths in small quantities, and at short intervals, and sometimes a small amount of stimulus.”

Pneumonia is inflammation of the *substance* of the lungs, in contradistinction to pleurisy, which is inflammation of its *investing membrane*. The two, however, are often found together, and when such is the case, the practitioner should direct his attention, chiefly, to the former; for the treatment which removes *it*, will infallibly cure the latter. Most generally, pneumonia begins with listlessness and lassitude; loss of appetite and head-ache, with strong disinclination to locomotion. These symptoms may continue from twelve to forty eight hours—seldom longer—when they are succeeded by a chill, of greater or less severity, followed by fever, pain in the side—particularly on making a deep inspiration—and cough, which the patient strives to suppress, on account of the pain it inflicts. Frequently, however, this disease comes on very suddenly. When the body is heated—especially from fatiguing exercise—and suddenly exposed to the action of severe cold, all the symptoms of pneumonia may be, and, indeed, they often are developed in from one to six hours, without any premonition whatever. After these phenomena have continued for a period, varying from twelve to twenty-four hours, the cough becomes more troublesome, and it is accompanied with expectoration of a very viscid and red, brick-dust colored sputa. The peculiar color is caused by the admixture of a certain amount of the colored particles of the blood, which may be seen in it through the microscope. The mixture is evidently very intimate; there is, in fact, in these cases, a hemorrhage, doubtless from the naked vessels of the pulmonary air-cells; but the appearance and color of the sputa differ very decidedly from those of the expectorated matter in ordinary cases of hæmoptysis. The difference is to be explained thus: in pneumonia, a copious secretion of mucus takes place from the membrane of the extreme

bronchial tubes, or bronchial passages ; and blood escaping from several minute vessels, becomes intimately intermixed with the mucus, and gives it its rusty color. The escape of blood and the secretion of mucus take place simultaneously, and in about equal proportions, and are dependent on the same cause, namely, that which irritates the lung. But in hæmoptysis, the escape of blood is independent of any secretion of mucus, and often takes place without it, and the quantity of blood is *always* greatly in excess of that of mucus. The character of the sputa will, at once, attract attention. Its adhesiveness is remarkable. The vessel, into which it is received, may be inverted, without, in the least, disturbing its contents. When present, this viscid and rusty state of the sputa makes it certain that we have a genuine case of pneumonia to deal with : it is *pathognomonic*.

Although the characteristic sputa alluded to, will enable us, beyond all doubt, to ascertain the presence of pneumonia, we are not to infer that the absence of this viscid and rusty expectoration is proof indubitable against the existence of this disease. Many cases of pneumonia pass through all their stages, and resolution takes place, without the occurrence of any expectoration or with that of a very trifling amount of mucus without color. Especially is this so, in cases of typhoid pneumonia. The patient does not expectorate, owing, no doubt, to his great prostration, and the dulness of his sensibilities.

In addition to the symptoms before mentioned, the tongue, generally, will be found to have a thick, white coat ; the face will be flushed, and the breathing much increased in frequency. Normal respiration, in the adult, varies from sixteen to twenty-five in the minute ; and the practitioner, by observing its increase or decrease, may, in the progress of a case, form a tolerably correct prognostic opinion from this symptom alone.

PROGNOSIS.—If only a portion of one lobe is affected, recovery is more frequent than the reverse, *if the treatment has not been of a too depleting nature* ; should the whole of one lobe be involved, or more than half the lung, the chances of recovery are much more diminished ; and should the inflammation invade the whole of one lung, the disease—unless under very favorable circumstances—is, too often, fatal. When the disease is seated in the upper lobe, the chances of recovery are less than when it occupies the

lower lobe. This is partly because when the disease attacks the *upper* lobe it partakes more of the typhoid nature, and partly, also, because this part is most apt to be affected in *old* persons.

TREATMENT.—In the treatment of this disease, let it not be forgotten that the lung is engorged, the skin hot and dry, and, most generally, the lower extremities are cool or cold, showing an unequal distribution of the blood, to be corrected as soon and as safely as is possible. The first thing to be done is to warm the extremities. To do this, place the pelvis and limbs in a tub of warm water, into which has been thrown a handful of salt, and a spoonful of Capsicum. Keep him there, if he can bear it, fifteen or twenty minutes; take him out, rub dry, and place him in bed, with a jug of warm water, or something of the kind, near his feet. Should he be unable to go through the process, he can lie in the bed, with his feet and legs in a vessel of warm water, medicated as before. While this bathing is going on, he should, every ten minutes, take four or five table-spoonfuls of the following infusion, made strong :—

Equal parts	{ Eupatorium perfoliatum — Bone-set,	
	{ Asclepias tuberosa — Pleurisy root,	
One half part	{ Cyripedium — Nerveine,	
	{ Ginger.	

Those who prefer extracts, can use them in the same proportions, observing, at the same time, to give freely of some bland infusion, such as sage, balm, &c.

Now, let him be sponged, *under* the bed-clothes, with tepid saleratus water, (an oz. to the gal.) This sponging should be repeated as often as the skin becomes uncomfortably dry and warm.

After the sponging, rub the skin, thoroughly, near the affected part, and for some considerable distance around it, with some good stimulating liniment; then apply a large-sized compress, of four or five thicknesses of old linen or cotton cloth, wrung out of *cold* water; and over this, another compress of the same kind, but *dry*; and over all a bandage, supported by slips of cloth, as shoulder straps, pinned to both compresses and bandage. Care must be taken not to have this bandage so tight as to interfere with the action of the chest in breathing. This application

should be renewed as often as it becomes dry; and continued as long as there is any pain or tenderness remaining.

Continue the infusion for two or three hours, until the patient becomes nauseated, when a dessert spoonful of the following infusion ought to be administered every twenty or thirty minutes:—

Lob. seed pulv.—2 parts,

Sang. Canadensis—Blood root—1 part.

It is proper to observe, in this connexion, that it is *not* advisable to bring on *severe* or *heavy* vomiting in this malady. There is no objection to occasional emesis. Indeed, the writer would advise it, provided it be gentle, and it be gradually induced. Nausea, with occasional, gentle emesis, should be kept up for twelve or twenty-four hours, or until the severity of the symptoms is mitigated.

When the pain and breathing become easier, and the skin becomes somewhat cool and moist, it will not be necessary to keep the patient nauseated the whole of the time; but nausea *should* be induced often enough, and kept up long enough at a time, to keep down fever, and to promote expectoration. The first-mentioned infusion will, very often, with the aid of but little of the second, answer nearly all the purposes required here.

Should there be torpidity of the liver, and consequent constipation, it will be well to give two or three grains of *Leptandrin*, night and morning, aided by enemas, if necessary, until this condition is removed. There ought to be *two*, certainly *one*, evacuation of the bowels, every twenty-four hours; at the same time, everything like active catharticism should be avoided.

The kidneys should not be forgotten. They play an important part in the economy of the system, and they are too often neglected. The urine, in pneumonia, is always scanty and high colored—showing plainly that these organs are not properly performing their functions. It is highly proper to aid or to stimulate them to action, by the *plentiful* use of a *strong* infusion of the *Galium Aparine*, (Cleavers.)

In cases that are undoubtedly typhoid, it need scarcely be said, that the free use of stimulants is of essential service; and it is often of great advantage to give quinine freely, the special indication for which, is *excessive perspiration*.

Cases occur, occasionally, which are complicated with inter-

mitting fever. Such demand the use of anti-periodics; hence quinine or its equivalent is indispensable in their treatment. It will not, however, answer the full purpose, to exhibit it alone. True, the intermitting symptoms may be suppressed by its use alone; but, while accomplishing this, the pneumonic symptoms will be aggravated. The fever and pulse will run higher; the difficulty and frequency of breathing will be increased; the pain and the cough will be aggravated, with a diminution of the previously existing expectoration. On the other hand, if with each dose of the quinine, a sufficiency of equal parts of *Lob. sem.* and *Ipecac.* be given to keep up continued nausea (*without vomiting*) during the period of the administration of the quinine, the before-mentioned troubles will be avoided, without abating, in the slightest degree, the intended therapeutic action of the quinine.

Throughout the whole course of the treatment, the patient ought to have—if strength and circumstances permit—the full, reclining, warm water, or mild vapor bath, once a day. Sedulous care must be taken to keep the extremities warm. In most cases, they are inclined to chilliness, which, if not counteracted, proves very injurious. If he asks for water, but *little* must be given at one time, and that not very cold. Allay his thirst by the *free* use of tepid, bland teas. From the beginning, let him have a *little* of easily-digested food (soups) at short intervals,—say every three hours. If the apartment, in which he lies, is open—admits too much cool air—surround his bed with curtains.

F. M. K.

HINTS ON DIAGNOSIS.

THE art of diagnosing diseases stands forth in bold relief, and claims the candid consideration and devoted attention of every member of the profession, who has any desire to fill even a respectable position in any of the practical departments of scientific medicine. It constitutes an essential, yea an indispensable qualification, a stepping stone, if you please, that leads to business, fame and success, without which he may live and die unnoticed and unknown.

Accuracy in diagnosis is the first and foremost object of our attention. It places within our reach, and comprehension, the

malady, whatever it may be, in plain and intelligible characters, and enables us to treat it rationally, if not successfully. It is a mental process, calling into play the higher attributes of the mind, the exercise of which are indispensably necessary to perform the duty well. It requires, also, a mind minute, exact, scrutinizing, retentive and analytical, capable of generalizing, and grouping together symptoms essential, and a capacity to reason closely. There are but few topics of interest that present a wider field, or one more fruitful in its productions, or one in which a greater diversity of mode prevails among the members of the profession. Take two men equally well informed in all things appertaining to their profession; one will make his diagnosis with much more ease and certainty, in far less time than the other. Some have the peculiar propensity to blunder about in a blind sort of a way like a ship at sea, without compass, tacking to and fro without any system; and should they arrive at just conclusions it is more by accident than skill; while others, on the contrary, proceed in a systematic manner, step by step, never putting a useless question or one which is not legitimate to the case; they keep their object in view with an unwavering steadiness, and follow it up with a pertinacity that could not be diverted from its object, or abated in its zeal: to witness a diagnosis made in this manner is not only a pleasure but a treat. But to witness one clumsily made is an infection intolerable to endure; more than this, it is most probably incorrect, and therefore dangerous to the patient; for a false diagnosis leads to an incorrect mode of medication.

The following short and simple rules, found in a discourse delivered by Hyde Salter, M. D., at the Charing Cross Hospital, will be found not only useful but truly valuable. W.

Rule 1.—Gain information in all possible ways without, and additional to, asking questions; that is, take the testimony of your senses—of sight, hearing, touch, taste, smell; examine well your patient's physiognomy, his expression, his complexion, his general aspect, his manner; observe his physical condition, if there are in it any of those pathognomonic signs that certain diseases hold out; mark the tone of his voice, its strength and weakness, whether it is hurried or deliberate. You will find the habitual practice of this of great advantage to you, and the evidence thus acquired of great value, for,

1st. It is a kind of evidence that cannot be sophisticated. Your senses cannot deceive you; your patient may, at least, attempt it, and this evidence may either corroborate his oral testimony or refute it. For example, suppose a man, on a club, professes the sight of one of his eyes to have failed, and so to be unable to follow his employment, and to be suspected of malingering, and on seeing him you detect an inequality of his pupils, and a slight ptosis of one of his eyelids, which had escaped the uninitiated, you feel at once that the man is probably speaking the truth. Suppose, on the other hand, that a man, whose symptoms make you suspect threatening delirium tremens, denies having taken any spirits for a week, and you smell his breath strongly of gin, you have not only strong presumptive evidence that your opinion is correct, but that the man's statements must be disregarded. This kind of evidence is, therefore, not only the most unimpeachable in itself, but a valuable check on other testimony.

2nd. It gives you a kind of evidence that nothing else will. Some things, definite in themselves, and that the senses can recognize, can yet not be described. Those who have once seen them know what they are; but no others. Such things are sometimes very subtle and delicate; but they are often very important and distinctive, even pathognomonic. Take, for instance, certain physiognomics; take the *faries hysterica*; I never saw a good description of this; I could not give one myself, but when once recognized, it is very unmistakable, and very characteristic, and might make all difference in your opinion of any given case. In some instances, as in skin disease, this sense-testimony is the only evidence you require.

3rd. It is evidence you can obtain without your patient's consciousness; and this under some circumstances is most important, because in some things the consciousness of the patient introduces a disturbing element, and invalidates the conclusions you would draw. For example, in counting the respiration, if your patient knows what you are about he immediately directs his attention to his breathing; he breathes voluntarily, and, inevitably, unnaturally; the moment the will is introduced into the respiratory act, which ought to be unconscious and involuntary, it becomes unnatural. When, therefore, I count the respiration, in order to

divert the patient's attention from what I am doing, I feel the pulse, which he imagines I am counting, and so breathes naturally. So, again, with regard to the pulse, in some cases, especially where there is much emotional disturbance, it is very desirable to ascertain its condition without the patient's consciousness, which would at once derange it. Now, taking the wrist would directly inform him of what is going on; I therefore pass my hand over the forehead, and keep it for a few seconds applied to the temples, as if I were feeling the temperature of the head, while in reality I am ascertaining the state of the pulse from the temporal artery.

4th. In some cases it is the only evidence you can get, as in the case of young children, or those who are reduced by their state of disease, for the time, to the condition of infants, in the etymological sense of the word, that is, cannot express themselves, as, for instance, from mania, coma, or any other condition interfering with intelligent speech.

5th. It will save you an immense deal of time; you may often by a glance obtain an amount of information that it would take a long time to acquire by question and answer. Practice will render this survey of your patient, and your conclusion from it, wonderfully rapid, and moreover render them more comprehensive and more infallibly correct; you will be astonished by and by at the almost instinctive correctness of the impressions you will thus acquire; from the slenderness of the data, the unconsciousness of mental process, and the rapidity at which the conclusions are arrived at, they will seem to you like inspirations. As an instance of the saving of time, see how one's work is shortened by chlorotic lips or a yellow conjunctiva.

Now there are two kinds of such evidence as this sense-evidence: one is that which is gained without any special process, without the use of any instrument or artificial means, which is immediate, impromptu, and of which the patient is unconscious; the other is that acquired by some instrumental means or special process, as by the stethoscope, by physical examination, the microscope, chemical reagents, etc. It is the former to which I particularly refer.

Rule II.—Lay greater stress on some signs than on others; as, for example,

a. On anatomical than on functional disturbances. Sometimes symptoms are discrepant—the tide of anatomical evidence will set in one direction and functional in another; in this case, always give the preference to evidence of an anatomical nature, for anatomical signs are always of more certain import. Functional symptoms have the value of probability only—they imply; anatomical symptoms have generally the value of certainty—they assert. For example, suppose a patient to have been suffering a week from all the symptoms of acute pleurisy—intense pain an inch or two below the nipple, inability to take a deep breath, or to lie on that side, intolerance of pressure in the corresponding intercostal space or spaces—but suppose that, on listening you hear pure and natural respiratory murmur, and a clear absence of all friction sounds, and that percussion and auscultation give you evidence of the thoracic viscera being in every respect anatomically healthy. Here you have a dilemma; anatomy says one thing, function another—which are you to believe? Anatomy, certainly. Why? Because you know that if the cause of pain had been pleuritis, you must by that time have had some anatomical result of it; its absence, therefore, negatives the supposition: and so you infer that it is rheumatism of the intercostals, or other muscles of that part of the parietes; or neuralgia; or, if in the case of a young woman, possibly hysteria.

b. Lay greater stress on some functional symptoms than on others; for example, on tenderness than pain. Suppose a patient were to come to you one day, complaining of colicky pain in the epigastrium and about the umbilicus, passing through the back, and the next day you find he has tenderness in the right iliac fossa, you know that this last is the real seat of the mischief, and the other merely the situation to which the pain was referred; this is a phenomenon of frequent occurrence in abdominal affections. Again, vomiting has a certain indicativeness, but blood-vomiting a much higher and more distinctive one.

c. Distinguish between pathognomonic and indifferent symptoms. The value of indifferent symptoms—i. e. those common to many diseases—is general, that of pathognomonic, special; indifferent symptoms may leave you many alternatives, pathognomonic, none. Fever, for example, is an indifferent symptom,

but the several stages of the fever-paroxysm occurring at the same time every other day is pathognomonic; it leaves you no alternative; you know at once what you have to deal with.

Rule III.—Pursue a definite order in your catechizings. The principle on which a diagnosis is made is that of elimination, of exclusion, showing what the disease is by showing what it is not. Every answer that is elicited strikes out a certain number of contingencies, and so circumscribes the area of what is still uncertain.

Now, this principle of elimination or exhaustion gives rise to two rules, with regard to the order and kind of questions put to your patients.

a. Put first those questions which exclude the greatest number of alternatives, that is, what is called “leading questions.”

b. Let each of the questions be devoted exclusively to the elimination of a certain amount of those alternatives, which the previous answers have left undecided; let them apply strictly and solely to what is left unsettled, that is, do not throw away any questions on points that previous questions have set at rest.

The order and kind of questions, based on these rules, that seem to me the best, and which I commonly observe, is something as follows :

1. Where is the pain (or symptom, whatever it may be)?
2. How long has it existed?
3. Has it ever occurred before?
4. The apparent cause?
5. In what way the functions of the organs are disturbed?
6. The *lædientia* and *juvantia*?
7. Anatomical evidence?
8. Physical examination?
9. History, especially with regard to
 - a.* Inherited diathetic peculiarity, such as struma, gout, rheumatism, etc.?
 - b.* Alcoholic, or other intemperance?
 - c.* Syphilis?
 - d.* Occupation?

It would not be necessary to put all these questions in all cases; some would be settled by few of them; for example, most

stomach affections would be settled by the fifth or sixth, most chest affections by the eighth; many affections would carry you on to question 9, clause *a*; delirium tremens to clause *b*; clause *c* will often be the turning point of your diagnosis; while lead palsy would carry you on to case *d*. Often, however, you will not have to put all the questions; the answers that you will receive from some will involve an inversion of the order of the rest, and you will make a short cut to a determined point.

Rule IV.—Other points must be observed in examining your patient, besides method.

First. Be slow and deliberate, give yourselves all the advantage over, and hold on, your patient, that you will gain by deliberation, self-possession, and presence of mind. Besides, you will, by a sort of infection, induce a similar character in your patient's answers, and you will have time to deliberate on the answer you get.

Secondly. Ask one thing at a time, and let the single object of that question be as definite as possible.

Thirdly. Pin your patient to your question; do not let him wander and be irrelevant, do not let him be indefinite, do not let him be evasive. You will often be troubled with answers of three kinds, especially from some classes of patients; the first you will get from old women and the garrulous, the second from the Irish, and the third from malingerers; indeed, you might name them the *responsio garrula*, the *responsio Hibernica*, and the *responsio mimotica*, respectively. I know of few things more difficult than making a prompt diagnosis out of an Irish patient; he calls his chest his stomach, and his stomach his chest; his heart is ubiquitous; if you ask him how long he has been ill, he tells you "a good bit;" and if he is better he says he is "no worse." I speak of the lower orders of Irish only, and I mention it as a warning, that you may know what to expect, and prepare yourselves accordingly, when you hear the Irish accent.

Fourthly. Be considerate and patient, and kind in your manner. This you will find of immense advantage, not only to your patient but to yourself. You will get both kinds of evidence much better, more truthful, and more natural—both that which you will receive in answer to questions, and that which your patient will furnish you with unconsciously to himself. In timid

persons, and those whose affections are of an emotional character, this point is of especial importance, and most of all in children; if you once set a child crying, your further investigation of its case is greatly embarrassed. Dr. West, in his work on diseases of children, has made some admirable observations on this point, that ought to be engraved on the memory of every one having anything to do with the treatment of children: I will refer you to them rather than mutilate them by abbreviation.

Rule V.—In difficult cases, where you are at a loss, it is often a good plan to forego the ordinary method of interrogating, and adopt some other. One of these is to let the patient tell his own story in his own way. In this way sometimes things will creep out that set-questions had not elicited, or questions may be suggested which before had not been thought of, but which may reach exactly the point which was required to clear doubt. Another is, Begin at the head and go downwards, as hunters “draw” a forest; pass through all the organs in a regular anatomical order, so that the state of none may elude you. In this way sometimes you may stumble upon some mischief in a part where you had little suspected it: at any rate you will be sure of meeting it where it exists, and will feel that all the organs which in your progress you leave, as it were, in your rear, may be disregarded.

Rule VI.—Do not be content till you have elicited a natural group of symptoms, but when you have once done this, assure yourself that you have attained your object. Do not let any amount of evidence in the opposite scale countervail it—the conclusiveness of such evidence is absolute, not relative; do not let any improbabilities, any deficiency of cause, any suspicion of collusion, shake your faith in the infallibility of this internal, this intrinsic evidence. No amount of sophistication can enable the uninitiated to stimulate the natural and self-consistent features of disease.

Rule VII.—Make yourself what jurists call “skilled witnesses;” familiarize yourselves with all those means of diagnosis, and of enlarging and rendering more precise your knowledge of disease, which the physician of the present day finds at his command, or you may renounce all hope, either of doing justice to yourselves or your patients, or of competing with your brothers in the pro-

fession, who are familiar with the use of these invaluable instruments—instruments, the revelations of which have almost transformed the face of modern medicine. There was a time when people used to die of dropsy : nobody dies of dropsy now. Those who used to die of dropsy, now die of lung, or heart, or liver, or ovarian, or kidney disease. And what has shown us this ! Mainly, the stethoscope, the microscope, and the test-tube. We cannot afford to depreciate or despise these aids, we shall be but blind guides without them ; and besides, human life is too precious a thing, and our tutelage of it too solemn, to permit us, in any thing that appertains to it, to give way to prejudice, or a miserable conservative obstructiveness.

The stethoscope was despised once, and there are many now of the same class of mind who attempt to depreciate the microscope, the chemical reagent, the stethometer, the weighing machine, the ophthalmoscopel, the test-paper, and the spirometer. We may safely leave them to fight their own battle. In the meantime, instead of abusing them, let us use them, let us make ourselves masters of them, let us add them to our resources.

Rule VIII.—Lastly, observe for yourselves, think for yourselves, judge for yourselves. Do not constantly carry about with you opinions that you have read as the interpreters of what you see ; if you do, it will constantly hamper and shackle your minds, you will get yourselves into a habit of seeing only what others have seen, and be blind to a great deal of instruction that disease will offer you. The present generation of medical men read too much and think too little ; the chronic and almost endemic malady from which we suffer is a plethora of books. There are some who can never see or discuss a case without quoting some authority ; instead of seeing with their own eyes they are always seeing with the eyes of Graves, or Allison, or Andral.

Now, in literature, “authority” may be final, and the author of the *Iliad* and the *Æneid* may determine the force of a particle or the length of a syllable ; but in science this is not so, and the testimony of nature must always overrule that of her interpreters. If you want to make any advance in medicine—if you would add any thing to the present stock of your knowledge—if you would receive into your minds the teachings of disease in all their simplicity and freshness—you must see and hear with your

own eyes and ears, and interpret for yourselves. Vindicate for yourselves, and constantly exercise that attribute of the best class of minds—independent and self-reliant thought: take as your own the motto of our highest scientific society, and early learn *nullius in verba magistri jurare*.—*Ex. Medical Journal*.

ASPHYXIA, ITS RATIONALE AND ITS REMEDY.

BY MARSHALL HALL, M.D., F. R. S.

THE term Asphyxia, which ought to be changed for Apnœa, designates that condition of the animal system which results from the suspension of respiration.

Respiration involves two processes—the inhalation of oxygen, and the exhalation of carbonic acid.

The remedy for the suspension of respiration is on every principle of common sense, the restoration of respiration. This view might be considered, irrespective of physiological inquiry and proof, as self-evident; but that proof, is amply supplied by physiology.

Of the two functions suspended, it is certain, from physiological inquiry, that the retention of the carbonic acid is by far the more fatal, and that, in a word, asphyxia is the result of the carbonic acid, retained in the blood, which becomes, in its excess, a blood-poison.

If this view be correct, it is evident that restored respiration is to the blood-poison in asphyxia what the stomach-pump is to poison in the stomach; and that it is *the* special remedy, the *sine qua non*, in asphyxia.

But this blood-poison is formed with a rapidity proportionate to the circulation, which is, in its turn, proportionate to the temperature. To elevate the temperature, or to accelerate the circulation, *without* having *first* secured the return of respiration, is therefore *not to save*, but in reality to *destroy life*!

Now let me draw my reader's attention to the *Rules* for treating asphyxia, proposed and practised by the Royal Humane Society. They are as follows:—

"1. Convey the body carefully, with the head and shoulders supported in a raised position, to the nearest house.

"2. Strip the body, and rub it dry; then wrap it in hot blankets, and then place it in a warm bed in a warm chamber free from smoke.

"3. Wipe and cleanse the mouth and nostrils.

"4. In order to restore the natural warmth of the body,—
Move a heated covered warming-pan over the back and spine.

Put bladders or bottles of hot water, or heated bricks, to the pit of the stomach, the arm-pits, between the thighs, and to the soles of the feet.

Foment the body with hot flannels.

Rub the body briskly with the hand; do not, however, suspend the use of the other means at the same time; but, if possible, immerse the body in a warm bath at blood heat, or 100 deg. of the thermometer, as this is preferable to the other means of restoring warmth.

"5. Volatile salts or hartshorn to be passed occasionally to and fro under the nostrils.

"6. No more persons to be admitted in the room than are absolutely necessary."

My first remark on those rules for treating asphyxia is, that "to convey the body to the nearest house," is doubly wrong. In the first place, the *loss of time* necessary for this purpose is—*loss of life!*—on the contrary, not a moment should be lost; the patient should be treated instantly,—on the spot, therefore. In the second place, except in very inclement weather, the exposure of the face and thorax to the breeze is an important auxiliary to the special treatment of asphyxia.

But most of all, the various modes of restoring the temperature of the patient, the warm bath especially, are objectionable, or more than objectionable; they are at once inappropriate, unphysiological, and deleterious.

If there be a fact well established in physiology, it is that an animal bears the suspension of respiration in proportion not to the warmth, but, within physiological limits, to the lowness of the temperature, the lower limit being about 60 ° Fahr. A warm bath of 100 ° Fahr. must be injurious.

All other modes of inducing warmth are also injurious, if they divert the attention from the *one remedy* in asphyxia—artificial respiration,—or otherwise interfere with the measure to be adopted with the object of restoring this lost function.

Such, then, are the views which the scientific physician *must* take in regard to the late rules for treating asphyxia promulgated by the Royal Humane Society.

I now proceed to state the measures by which those rules must be replaced.

I revert to a proposition already made: as one remedy for the condition so induced is, self-evidently and experimentally, the restoration of respiration.

But there is an impediment to artificial respiration never before pointed out. It is the obstruction of the glottis or the entrance into the wind-pipe, in the supine position, by the tongue falling backwards, and carrying with it the epiglottis—an event which can only be effectually remedied by adopting the *prone position*.

In this position the tongue falls forward, drawing with it the epiglottis, and leaving the ingress into the wind-pipe *free*.

But even when the *way* is patent, there remains the question, how is respiration to be effected? The syringe or the bellows may not be at hand, and if they were, the violence used by them is apt to *tear* the delicate tissue of the lungs. The mode proposed by Leroy, of compressing the thorax by means of a bandage, and allowing its expansion by the resilience of the costal cartilages, is proved by experiment to be futile, chiefly, no doubt, from its being attempted in the supine position, with the glottis obstructed.

The one effectual mode of proceeding is this: Let the patient be placed in the prone position, the head and neck being preserved in their proper place. The tongue will fall forward, and leave the entrance into the windpipe free. But this is not all, the thorax and abdomen will be compressed with a force equal to the weight of the body, and expiration will take place. Let the body be now *turned* gently on the side, (through rather more than the quarter of a circle), and the pressure on the thorax and abdomen will be removed, and *inspiration*—effectual *inspiration*—will take place! The expiration and inspiration are aug-

mented by timeously applying and removing alternately pressure on the spine and ribs.

Nothing can be more beautiful than this life-giving—(if life *can* be given)—this breathing process.

In one series of experiments, twenty cubic inches of air were expelled on placing a corpse in the prone position, and ten cubic inches more by making pressure on the thorax and ribs, the *same* quantities being *inhaled* on removing that pressure, and on rotating the body on its side. But I must give the experiments in detail :—

A subject was laid on the table, and pressure made on the thorax and ribs, so as to imitate the procedure of Leroy. There was no result: a little gurgling was heard in the throat, but *no inspiration* followed. The tongue had fallen backwards, and closed the glottis or aperture into the windpipe! All inspiration was prevented.

Another subject was placed in a *prone* position. The tongue having fallen *forwards*, and the glottis being free, there was the expiration of twenty cubic inches of air, a quantity increased by ten cubic inches more on making pressure along the posterior part of the thorax and on the ribs. On removing this pressure, and turning the body through a quarter of a circle or rather more, on the side, the whole of the thirty cubic inches of air were *inspired*!

These manœuvres being repeated, ample respiration was performed!

Nay, there may be a question whether such considerable acts of respiration may not be too much.

It is to be observed, however, that in this mode of artificial respiration, *no force* is used; the lung therefore is not injured; and that, as the air in the trachea and bronchial tubes undergoes little or no change in quantity, the whole inspired air passes into the air-cells, where the function of respiration is alone performed.

It deserves to be noticed, that in the beginning of this experiment in the prone position, the head had been allowed to hang over the edge of the table: all respiration was frustrated! *Such is the importance of position.*

Reserving the full exposition of this method of *postural respiration*, this thesopnœa, (from *θεσις*, position), for another occasion, I will conclude by reducing these views into the simplest *Rules* for the treatment of asphyxia.

New Rules for the Treatment of Asphyxia.

I. Send with all speed for medical aid, for articles of clothing, blankets, &c.

II. Treat the patient on the spot, in the open air, exposing the face and chest freely to the breeze, except in too cold weather.

I. *To excite Respiration.*

III. Place the patient gently on the face, (to allow any fluids to flow from the mouth.)

IV. Then raise the patient into the sitting posture, and endeavor to *excite* respiration,

1. By snuff, hartshorn, &c., applied to the nostrils;
2. By irritating the throat by a feather or the finger;
3. By dashing hot and cold water *alternately* on the face and chest.

If there be no success, lose no time, but

II. *To imitate Respiration.*

V. Replace the patient on his face, his arms under his head, that the tongue may fall *forward*, and leave the entrance into the windpipe free, and that any fluids may flow out of the mouth; then

1. Turn the body gradually but completely on the *side*, and a *little more*; and then again on the face, alternately (to induce *inspiration* and *expiration*);
2. When replaced, apply pressure along the back and ribs, and then remove it (to induce further *expiration* and *inspiration*), and proceed as before.

Let these measures be repeated gently, deliberately, but efficiently and perseveringly, *sixteen times* in the minute, *only*.

III. *To induce Circulation and Warmth.*

1. *Continuing* these measures, rub all the limbs and the trunk *upwards*, with the warm hands, making *firm pressure* energetically;
2. Replace the wet clothes by such other coverings, &c, as can be procured.

VI. *Omit the warm bath, until respiration be re-established.*

To recapitulate, I observe that—

1. If there be one fact more self-evident than another, it is that artificial respiration is the *sine qua non* in the treatment of asphyxia, apnœa, or suspended respiration.

2. If there be one fact more established in physiology than another, it is that within just limits, a *low* temperature conduces to the protraction of life, in cases of suspended respiration, and that a more elevated temperature destroys life. This is a result of the admirable, the incomparable work of Edwards.

3. Now the *only* mode of inducing efficient *respiration* artificially, at all times and under all circumstances, by the hands alone, is that of the postural manœuvres described in this paper.

This measure *must* be adopted.

4. The *next* measure is, I have stated, to restore the *circulation* and *warmth* by means of pressure firmly and simultaneously applied *in the course of the veins*, therefore *upwards*.

5. And the measure *not to be adopted*, because it tends to extinguish life, is *the warm bath without* artificial respiration.

This measure *must* be relinquished.

These conclusions are at once the conclusions of common sense and of physiological experiment. On these views human life may, nay, must, sometimes depend.



THE AMERICAN VEGETARIAN SOCIETY.

The seventh annual meeting of this society was held on the 10th of September, in the lecture room of the Hydropathic College in New York city.

The President, the venerable Dr. Alcott, of Mass., was in the chair, and Jos. Metcalfe of Frankfort, Pa., acted as Secretary.

The forenoon was chiefly occupied with the reading of letters of sympathy and encouragement from J. A. Brooks, who is now in Africa; Dr. A. B. Alcott, N. Y.; Dr. Field, Mass.; Jos. Wright, Philadelphia, and the Rev. Wm. Metcalfe, Corresponding Secretary, who is temporarily residing in England.

Addresses were delivered by Dr. Trall, of New York; Dr. Jackson, of Glen Haven; Dr. DeWolfe, of Philadelphia, and by the President.

Remarks were also made by Dr. W. F. Reh, of New Orleans ; and by Drs. W. T. Kays and John Grimes, of New Jersey.

About a dozen new members were enrolled, and the friends of the cause are thought to be increasing in numbers. The most rapid increase reported during the last year has taken place in Great Britain.

The following preamble and resolutions were adopted :

Whereas, practical vegetarians have proved to themselves (and can demonstrate to all intelligent investigators,) that its expenditures are more economical, its effects upon the physical man more healthful ; and that through it the physical, intellectual, moral and spiritual natures of man are more harmoniously and naturally developed ; therefore :

Resolved: That we, in confidence, present the dietetic reform to the world as the basis of all reforms, aiming, as it does, to promote harmony, establish justice and propagate equity and brotherhood on earth.

Resolved, That all truly valuable Vegetarianism must have truth for its basis ; that all vegetarian practice, to be successful, must be conducted in harmony with the great truth which lies at the foundation ; that without a strict observance of this rule, our vegetarian practice will be always fluctuating, and vegetarians themselves, under the influence of appetite and interest, will be inconsistent in practice, and degrade the cause which they profess to love and advocate.

Resolved, That because an idea is laughed at, it is thereby not proved to be untrue, nor because it is applauded, is it proved to be true, and Vegetarianism is entitled to no less consideration because *Flesh Eaters* laugh at it or sneer at it.

Resolved, That vegetarian diet is superior to flesh diet, in any and every aspect in which it can be viewed. Human beings are more free from disease, and clearer in intellect, and that as far as facts go, they show this statement to be true.

Resolved, That the Corresponding Secretary be solicited to make earnest efforts to increase the membership of this Society by incorporating into it the numerous friends of the cause scattered over the United States and Canada ; to solicit at their hands pecuniary aid, that this Society may be enabled to place its principles before the minds of the people.

The officers chosen for the ensuing year are :

President, DR. W. A. ALCOTT, Massachusetts.

Treasurer, JAS. BROOKS, ESQ., Philadelphia.

Corresponding Secretary, REV. W. METCALFE, Philadelphia,

Recording, do. JOSEPH METCALFE, Frankfort, Pa.

Fifteen Vice Presidents were also chosen, among whom we notice the name of our distinguished and venerable fellow citizen, Prof. R. D. Mussey, of the Miami Medical College.

In connection with the above, which we condense from the *Water Cure Journal*, we would call the attention of our readers to the importance of Dietetic Reform. Whatever may be our notions in reference to the use of the flesh of animals as food, there can be, among intelligent and thoughtful men, but one opinion as to the importance of having it free from disease. And yet it is not to be denied that the fattening of most of the animals used for food is effected at the expense of an entire perversion of their natural habits, the tendency of which is necessarily towards disease and death. And this perversion is not without its visible effects in the animals themselves after being slaughtered. Let any one who wishes to satisfy himself in regard to this matter, examine the small glands of the neck, the mesenteric glands, and the liver of a number of well fattened and apparently healthy swine, and then ask himself if such food can reasonably be supposed to be promotive of good health. How much worse is the case when a fatal disease is prevailing, as at the present time, and thousands of apparently healthy animals are dying of only a few hours manifest disease! How can you know that the animal upon whose flesh you are feeding, would have lived twenty-four hours longer, had he not been slaughtered for your use? There are other and very important reasons for the profession being well informed upon the subject of dietetics, and we may perhaps devote more space to their consideration hereafter. Meanwhile we shall be glad to have those who have studied this subject carefully, communicate to us the result of their investigations. We refer not now particularly, to the matter of flesh eating, but to that of diet in general. We can see no reason why the flesh of healthy animals may not be used with much less detriment to ourselves than those highly concentrated preparations, too often composed almost entirely

of one or two alimentary principles to the exclusion of all others, so often found upon our tables. The fruit of the garden was man's primitive food, and few now doubt that it is still sufficiently nutritious to answer all the requirements of our nature. In our country, however, the use of a flesh diet has become so universal, that it is considered almost indispensable to the laboring man. A better acquaintance with the dietetic habits of many of the most hardy and athletic people in other portions of the world would correct the error.

G.

CHEMISTRY OF FOOD.

[Continued.]

The organs of a living body have no power to create matter. They can only change its form, and appropriate it to the various demands of organic life. Hence the elements of living bodies must be identical with the elements of the food by which they are nourished. In the human body their number is thirteen, viz :

1 Carbon	8 Chlorine
2 Hydrogen	9 Sodium
3 Oxygen	10 Calcium
4 Nitrogen	11 Potassium
5 Phosphorus	12 Magnesium
6 Sulphur	13 Fluorine
7 Iron	

Traces of Manganese, Silicon, Aluminium, Lead, Copper, Mercury and Arsenic have sometimes been detected in analyses of the human body ; but as their occurrence is rare, and, in many cases, to be accounted for by reference to the habits of the individuals in whom they occur, they are considered accidental rather than essential constituents of the organism. It is not strange that Aluminium should be found in the Negroes of Guinea, the Javanese, and some others who habitually eat clay as a luxury, or that Mercury, Lead and Arsenic should occur in those whose business it is to work in such metals, or who have taken considerable quantities of them as medicines. The thirteen elements enumerated in the above table being constant, justifies the conclusion that they are essential constituents of the human body.

To facilitate our investigations, we shall consider:—

1. The Elements of Food,
2. Alimentary Principles,
3. Compound Aliments.

The meaning of the term *Element*, or *Simple Body*, has already been made sufficiently clear, and needs not now any further notice. Before proceeding to speak of individuals of this class, it maybe well to show what is meant by the terms *Alimentary Principles* and *Compound Aliments*.

All substances adapted to the use of man as food are called *Compound Aliments*. These are composed of other and simpler combinations denominated *Alimentary Principles*. Flesh, for example, a *Compound Aliment*, is made up chiefly, of fibrine, albumen, gelatine, hæmotosin, fat and water, *Alimentary Principles*. Wheat, a compound Aliment, is found to contain starch, gluten, sugar and gum, which are Alimentary Principles.

Alimentary Principles are composed of two or more simple elements, and many of them are highly complicated organic compounds, while very few are found in inorganic matter.

As illustrations:— the formula for fibrine is $C_48H_{36}O_{14}N_6$ (SP.) ; for gelatine, $C_{13}H_{10}N_2O_5$; for starch, $C_{12}H_{10}O_{10}$; for sugar, (from the sugar cane,) $C_{12}H_{11}O_{11}$; and a similar complexity of constitution is characteristic of the Alimentary principles generally.

I. CHEMICAL ELEMENTS OF FOOD.

CARBON. This element is predominant in organic matter. It is found pure in the diamond, and more or less adulterated in the various forms of fossil coal and charcoal, and also in plumbago. It enters largely into the composition of nutritive substances; constituting about 47 per cent of cane sugar, 40 per cent of sugar of milk, and 36 per cent of grape sugar; while starch contains 37 to 44 per cent; mucilage, 36 to 45; proteine compounds, about 55; grains, (wheat, oats, rye, &c.) 46 to 51; fats and oils, 78 to 79; blood, 10; dried blood, 52; fresh meat, (devoid of fat) 14; and dried meats, 51 to 53 per cent. (These estimates are derived from analyses by Poligot, Prout, Liebig, Beraud, Chevreul, Sausure and others, as found in the excellent work of J. Pereira, M. D., on *Food and Diet*. Many of the facts to which we shall

refer in this and the subsequent articles of our series, are derived from that valuable book.)

The observations of Baron Liebig, made upon a number of soldiers in barracks, taking moderate exercise, show that each man consumed daily about one pound of carbon. Assuming that there was neither a gain or loss of flesh, and making due allowance for the carbon contained in the fœces and urine, he concludes that there is still 15 oz. 140 grs. avoirdupois, or $6.702\frac{1}{2}$ grs. troy, to be accounted for, which must have been thrown out of the system by the lungs and skin, in the form of carbonic acid. This would require, for the conversion of carbon into carbonic acid, 17.840 grs. of oxygen; sixteen grains of oxygen being required to combine with six of carbon to form 22 of carbonic acid gas. The amount of oxygen consumed, and of carbonic acid produced in respiration, has been variously estimated as follows;—

Authorities.	Oxygen consumed.	Carb. acid produced.
Lavoisier and Seguin,	15.661 grs.	8.584 grs.
Menzies,	17.625 do.	
Davy,	15.751 do.	17.811 do.
Allen and Pepys,	13.464 do.	18.612 do.

These estimates fall considerably below that of Liebig, as above, in which the oxygen consumed is 17.840 grs., and the carbonic acid produced $24.542\frac{1}{2}$ grs.

So many circumstances affect the results of all such investigations, that it is impossible to arrive at any very correct conclusions. The consumption of carbon by its union with oxygen to form carbonic acid, is sufficient to account, in a great degree at least, for the temperature so uniformly maintained in the body. According to Despretz, one pound of pure charcoal evolves, when burned in pure oxygen gas, sufficient heat to raise the temperature of 78 lbs of water from 32° to 212° Fahr.

This amount of heat, then, very nearly, must be produced by the oxydation of an equal quantity of carbon in the human body. But this is not the only source of animal heat. Hydrogen and oxygen, in combining with each other, also evolve heat, and the same is true of other chemical transformations pertaining to vitality.

Liebig contends that all the oxygen required for the consumption of the carbon of food is not derived from the atmosphere, but is, in part, produced by the conversion of starch into fat ;

One equivalent of fat	=	C11	H10	O
One do. carbonic acid	=	C		O2
Seven do. oxygen	=			O7
<hr/>				
One do. starch	=	C12	H10	O10

As animal heat is chiefly the result of the oxydation of the carbon of food, it follows that in cold climates and in cold weather, a greater amount of carbonaceous diet will be required to keep up the temperature than in warm climates and in warm weather. This is fully confirmed by experience. Sir John Ross says, "He who is well fed resists cold much better than the man who is stinted, while starvation from cold follows but too soon a starvation in food. This doubtless explains, in a great measure, the resisting powers of the natives of these frozen climates: their consumption of food, it is familiar, being enormous, and often incredible." (*Narrative of a Second Voyage in search of a North-West Passage*; page 200.)

The voracious habits of the inhabitants of the frigid zones, are perhaps, not altogether the consequence of the severity of the climate in which they live. The Icelanders, Laplanders, Norwegians, and the inhabitants of the Alpine regions of Southern Europe are not extravagant in the use of food, while the Hottentots and Bushmen of Southern Africa are notorious gluttons. As a general proposition, however, it is true that the demand for carbonaceous food is regulated by the temperature of the climate. The occurrence of hepatic diseases in persons from temperate regions visiting tropical countries, is generally admitted to be owing, in part at least, to the continuance of such dietetic habits as they have been accustomed to in their native lands. G.

HAIR TONIC.—To one pint of a strong decoction of white-oak bark, add:—

One oz. Tinc. Cantharides,
 Two do. Lard Oil,
 One do. Aqua Ammonia,
 Twenty do. Bay Rum:
 Mix and perfume to suit the fancy.

This is an excellent restorative for the hair, when disposed to fall, in convalescence from fever. It restores the hair in baldness; removes dandriff and scaly eruptions of the scalp, and keeps the hair soft and glossy.

Editorial.

CLINICS IN THE COMMERCIAL HOSPITAL.

During the past month, the Clinics in the above institution have steadily gained, both in interest and usefulness, and continue to attract a large proportion of the students of medicine, now in our city, preparing themselves for the arduous duties of their chosen profession.

It would be gratifying to us, and no doubt to the numerous patrons of the Journal, to trace each case presented, give its history, symptoms and treatment, accompanied with such remarks as are required to place in the possession of the reader, a synopsis of the cases presented ; but this would be incompatible with the design and present size of our journal.

In the medical department, numerous and highly interesting cases have been presented, many of whom carried with them the unmistakable signs of intermittent fever. The treatment recommended is such as every well-informed practitioner of the west is familiar with. Prof. Armor thinks well of sulphur combined with quinine, administered in doses suitable to each case, corresponding to the quantity of each when used singly.

Diseases of the air-passages have received a large share of attention, the pathological condition of each being forcibly and clearly presented. The practice of grouping together a number of cases, and by contrast speaking of each one, adds much to the interest, and facilitates the mode of imparting instruction. In those affections dependent on nervous irritability, cherry-laurel water, combined with an equal quantity of the tincture of lobelia, (a drachm of the compound to be administered as often as required,) is a remedy highly esteemed and frequently used by Dr. Armor.

The surgical department has furnished an abundant supply of syphilitic cases, both in males and females, many of whom are improving under a generous diet, recommended with a view to build up the broken-down constitutions. This mode of medication, if medication it may be called, is certainly more congenial to

the feelings of the patients, as well as more successful, than the practice relied upon by the older members of the profession. In connection with cleanliness and large doses of the iodide of potassium, varying from ten to fifteen grains three times a day, cases of a very unpromising character have rapidly improved, and promise well for a speedy recovery. One case, with syphilitic eruptions from head to foot, is making rapid progress towards health; and another of partial paralysis involving one side of the face, has, within a few days, regained the use of his muscles, and his features are rapidly assuming their natural form and appearance.

Dr. Blackman related a case operated on for stone in the bladder, of hæmorrhagic diathesis, a patient of Dr. Foster's, in which it became necessary to constrict the bleeding vessels laid open in the perineum, by applying a sponge to the parts saturated with the per-chloride of iron, which fulfilled the indications most admirably. The sponge was allowed to remain *in situ*, and the thighs brought together, and in a few minutes a complete suppression of the hæmorrhage was accomplished, and no inconvenience whatever was experienced from the sponge, loaded with the styptic. The preparation referred to is about four times as strong as the tincture ferri chloride of the U. S. Dispensatory, and is one of the most valuable styptics known to the profession.

The patient operated on for tumor of the neck, reported in our last, is now fast recovering, and in the course of a week, will, in all probability, be able to leave for his residence in the interior of the State. W.

CHRONIC AGUE.—℞. Quinine, twenty grains, oil of sassafras, one half of a drachm, alcohol one ounce. Dose—a tea-spoonful three times a day. It will in two or three days arrest the paroxysm, and, if used in small doses and occasionally afterwards, for a few weeks, will prevent a relapse.

HÆMORRHOIDAL TUMORS. — ℞. Oil of pennyroyal two drachms, and sweet cream six to eight drachms, applied locally several times a day. At the same time keep the bowels open with cream of tartar, jalap, senna, and sulphur, equal parts. Obstinate and long standing cases may be perfectly cured by the use of these remedies.

MURIATE OF AMMONIA.—This, applied locally to swellings, tumors, congestions, inflammations, indurations, enlargements, hypertrophies, in any and all parts of the body, from whatever cause, and taken internally in alterative doses, has been most successfully used for many years by Prof. Snyder, and he confidently recommends it to the profession. We have for some time looked upon the ammoniacal salts as possessing great power for the regulation of capillary action, and as a consequence, normal nutrition.

TINC. OF MUSK AND AMBER.—Dr. Hauner, of Germany, considers this a reliable remedy for spasm of the muscles of the larynx. Thirty cases were successfully treated with it.

ARNICA MONTANA.—This, Dr. H. found valuable in causing absorption of pleuritic exudation, and exudation from the membranes of the brain.

VALERIANTE OF AMMONIA.—Valerianic acid and ammonia. This has been given in one and two tea-spoonful doses, for neuralgia, with success.

SANTONINE. -- The active principle of *Artemisia Santonica*—Southern-wood. The *Veterinarian* speaks of this remedy in the removal of intestinal worms. The dose—a few grains combined with sugar.

CYANURET OF POTASSIUM.—One dram of this article dissolved in an ounce of water, will remove the stain of nitrate of silver from the skin or linen.

MEDICAL WORLD.—We have read, with pleasure, nearly every article in Vol. I, number 6, of this new, popular, and scientific periodical—a journal liberal in its tendency, admitting communications from all classes of physicians. Its principal editor, J. V. C. Smith, M. D., for more than a quarter of a century the senior editor of the Boston Medical and Surgical Journal, is a gentleman who stands high with the profession both at home and abroad. Edward Sutton Smith, M. D., assistant editor. Published weekly by Damrell, Moore and Coolidge, Boston, Mass.

POISONING BY CHLOROFORM.—The most extraordinary overdose of Chloroform, says the London Lancet, yet known, was wilfully swallowed by a patient recently in London. The man drank about four ounces at one draught! Wild intoxication, followed by profound insensibility, ensued; but, after various relapses and accidents, he is now quite well!

REMARKABLE CASE.—Mrs Julia Syles, wife of John Syles, of Blackstone, England, died on the 14th of Oct., of dropsy, from which she had suffered for five years. During that time she had been tapped upwards of one hundred and forty times, and more than three thousand pounds of water were extracted!

POISONING.—Dr. S. Robinson, who was a student of the celebrated Dr. Rush of Philadelphia, speaking of the use of poisons as medicines, says:

“It is astonishing, and will remain a matter of astonishment to future ages, that the rankest and most virulent poisons which the three physical kingdoms (animal, mineral and vegetable) afford, are considered the greatest remedial agents now in use, and have been for the last fifty years. It would be a melancholy tale, if the millions who have perished by these deadly poisons could rise from their ashes to utter forth their doleful lamentations.”

TO PREVENT FERMENTATION.—One dram of Spirits of Ammonia put into a pint of fermenting syrup, will neutralize the acid at once, and prevent fermentation, no smell or taste of the ammonia remaining.

PAYMENTS FOR THE JOURNAL.

SEPT. *One dollar each.*—Thos. B. Bell, Texas; J. L. Furber, Ill.; J. W. Williams, Pa.; John Goucher, Pa.; J. L. Cordingly, Pa.; A. E. Currier, Ill. *Two dollars each.*—Wm. M. Johnson, Ill. OCT. *One dollar each.*—Amos Hall Ill.; E. C. Young, Ohio; James Sidwell, Ohio; Lee and Wall, Ohio; Gabriel Miesse, Ohio; Silas Taylor, Ky.; E. Harris, N. Y.; J. Taylor, N. Y.; C. M. Finch, Ohio; E. Landis, Ill.; J. H. Stebbins, N. Y.; Charles Cook, Ill.; H. M. Hamlin, Ill.; F. C. Hawley, Ohio; J. C. Mills, N. Y.; Josiah Gates, Mo.; M. A. Fox, Canada; J. T. Bunker, Geo.; Wm. G. Brown, Ill.; R. C. Cone, Minnesota Territory; A. F. Rudd, Ill.; Mrs. S. Farror, Me.; Mrs. D. O. Laughlin, Me.; J. W. Crippin, 50 cts., Ohio; Dyer and Freeman, \$2.

T H E

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No. 5.

FACTS CONCERNING ARSENIC EATING.

“IN some parts of lower Austria, in Styria, and especially in the hilly country towards Hungary, there prevails among the common people an extraordinary custom of eating arsenic. During the smelting of lead, copper and other ores, white arsenic flies off in fumes, and condenses in the solid form in the long chimneys which are usually attached to the smelting-furnaces. From chimneys, in the mining regions, the arsenic is obtained, and is sold to the people by itinerant pedlars and herbalists. It is known by the name of *hidri*, and the process of using it is of considerable antiquity. By many, it is swallowed daily throughout a long life, and the custom is even handed down hereditarily from father to son. Arsenic is thus consumed chiefly for two purposes—first, to give plumpness to the figure, cleanness and softness to the skin, and beauty and freshness to the complexion; second, to improve the breathing and give longness of wind, so that steep and continuous heights may be climbed without difficulty and exhaustion of breath. Both these results are described as following almost invariably from the prolonged use of arsenic, either by man or by animals. For the former purpose, young peasants, both male and female, have recourse to it, with the view of adding to their charms in the eyes of each other; and it is remarkable to see how wonderfully well they attain their object; for these young persons who adopt the practice are generally remarkable for clear and blooming complexions, for full rounded figures, and for a healthy appearance. For the sec-

ond purpose—that of rendering the breathing easier when going up hill—a small fragment of arsenic is put into the mouth, and allowed to dissolve, which it does very slowly. The effect is described as astonishing. Hights are easily and rapidly ascended, which could not otherwise be surmounted without great difficulty of breathing.”

The article above, we take from the December No. of the *Veterinary Journal*, into which it had been copied from *Johnson's Chemistry of Common Life*.

It is not uncommon to see articles, which possess some novel or eccentric features, take very large rounds of newspaper circulation, when once started. This of course is all well enough, so far as the mere matter of news is concerned. Yet when it becomes an indiscriminate practice to give articles for news' sake, regardless of the principles, or the character of the facts involved, or of the impressions that may be thereby produced, such practice is certainly reprehensible.

The doctrine that ‘truth left to open combat is never put to worse;’ and that error needs but to be exposed to public gaze to meet its merited condemnation, leads many to publish novelties under the expectation that such matter will be sifted in the public mind, and the good retained, while the bad, is, on the other hand, rejected. Such a rule of action seems to be well enough adapted to our country, in which so much general intelligence is possessed, and where the public mind is eagerly in search of knowledge, and, is considerably capable of discriminating between truth and error.

Here, every fact, therefore, which gives any reasonable promise of good, should be freely heralded to the public. But on the other hand, it is nevertheless proper that good judgment should be exercised by *editors* and *news guardians*, and that all matter which must evidently prove pernicious when published, should be suppressed, however *novel* or *exciting* it may be.

These remarks are less intended for application to the present instance, than for the maintenance of a general principle. Yet this example may serve as an illustration.

Arsenic—*arsenous acid*—has, from its earliest history, served as an example of the most *virulent corrosive poisons*. Indeed, the Greek name, *arsinikon*, was at first a general cognomen

applied to the most virulent mineral poisons, and as this article seemed to take the lead in activity or *virulency*, it became entitled to the name exclusively.

Projected in the face of all this, we find the legendary practice of the mountaineers of the Styrian Alps, and the plebeians of the mineral districts of western Hungary and upper Styria.

We would not, however, ignore the merits of any practice simply because of its humble or superstitious origin, for the resources of medical art are indeed too deficient without the practice of such dogmatism. Yet, as we find in the present age such ample facilities for testing, or properly appreciating, the relative merits or demerits of medical agents and practices, we are by no means thrown back upon blind traditions for our guides. This practice with arsenic is, most evidently, a relic of Druidism. When the Plague prevailed so awfully at London, in 1665, it was supposed to have arisen from planetary disturbance. W. KEMP, A. M. dedicated a pamphlet to Charles II. on the subject of that distemper; he says: "One cause of breeding the pestilence is that corruption of the air, which is occasioned by the influence of the *stars*, by the aspects, conjunctions, and oppositions of the Planets, by the eclipses of the Sun and Moon, and the consequences of Comets. '*Astra regunt homines, sed regit astra Deus.*'"

Under this notion, amulets of precious stones, and particularly of *arsenic*, in the form of *Orpiment*, were worn over the region of the heart to repel the contagion. ANGELUS SALA, gives a formula termed *Magnes Arsenicalis*, that was supposed instantly to draw out the poison when brought into contact with the person affected.

The Druids of Britain and Gaul had so implanted their superstitions among the Teutonic races, that we find the relics of it even in this day, not only in western Europe, but in America, and wherever the descendants of these nations are found.

In no part of the world have the superstitious practices of the Druids been more cherished and perpetuated than in the Roman Catholic regions of Styria, and whether or not the present practice of *eating arsenic* in that country, can be directly traced to the Druidical *amulets of arsenic*, two facts are certain; *first*, that some of the *other* amulets, composed of precious stones,

were by the same superstition through which they were first introduced as prophylactics against diseases, afterwards also taken *internally* in a powdered state; and *secondly*, the *arsenic*, now so taken, is from a tradition running back beyond the memory of present generations. And what is there more remarkable in the taking of arsenic through superstition, than the other 'thousand and one' fancied protectives against diseases and evil spirits? especially since it is known that the Druids employed in this way nearly all the poisons known by them, and considered the most virulent kinds as being superior in their power against the *Infernals*, and the diseases they produced.

Some of the older books in our libraries still present us records of the formulas of many of the remedies of the more remote superstitions; some of which are as disgusting as others are poisonous. Excrements, reptiles, etc., were taken down in formal ceremony. The far-famed and antique *Theriaca Andromachi*, among its 72 ingredients, contained, with other revolting articles, *vipers*; and was considered an absolute remedy for malarious, and all other diseases; also venomous bites and stings. When taken night and morning, it was regarded as a certain protection against all harm, bodily and spiritual.

The 'Sympathetic Powder,' introduced at Montpellier before an assembly of nobles and learned men, and the formula of which was purchased by King JAMES, and immortalized by DRYDEN and Sir WALTER SCOTT, may not be overlooked in this connection, although it was infinitely more harmless than some other superstitious remedies.

DRYDEN, in his 'Enchanted Island,' shows the effect of this sympathetic powder in the 'Weapon Salve;' act fifth and scene second:

Ariel. 'Anoint the sword which pierced him with this
Weapon Salve, and wrap it close from air
Till I have time to visit it again.'

Again in scene fourth, *Miranda* enters with *Hippolito's* sword wrapped up.

Hippolito. 'O my wounds pain me!'

[*She unwraps the sword.*]

Miranda. 'I am come to ease you.'

Hippolito. 'Alas I feel the cold air come to me,

My wounds shoot worse than ever.'

Miranda. 'Does it still grieve you?'

[*She wipes and anoints the sword.*]

Hippolito. 'Now, methinks there's something laid just upon it.'

Miranda. 'Do you find no ease?'

Hippolito. 'Yes, yes; upon the sudden all this pain

Is leaving me—sweet Heaven, how am I eased?'

And what are we to say of what comes even to us, of this superstition, and salutes our ears and eyes every day, in almost all kinds of society? In medicine, we have yet many relics of Druidism, and of superstition in ages still more remote. The ancient notions regarding the government of plants, and other objects by the stars, are not yet, by any means, entirely out of practice. An instance of the modified form of one of the very signs that were marked upon objects as indicating the particular stars that controlled them, is still in use, although it is somewhat changed in its meaning—it is the recipe sign, \mathcal{R} —which was the the sign of Jupiter, that is here indicated. The phases of the moon—whether she is in the 'increase' or 'decrease'—whether the *sign* is 'up' or 'down,' with numerous other signs, are now in close observance, and thousands upon thousands of people will not undertake any considerable enterprise unless the *sign is right*. We have still among us men who will *breathe* or *blow* upon the sick, or upon diseased parts, and perform sundry manipulations that are supposed to be certainly effectual, in curing maladies, staunching blood, easing pain, etc., etc.

"Tom Pots was but a serving man,
But yet he was a doctor good,
He bound his 'kerchief on the wound,
And *with some kind words* staunched the blood."

SIR W. SCOTT.

Thus, then, while finding so many absurdities brought down to us from the dark ages, and still in practice, we are by no means left to search for evidences of *special utility* in the practice in Styria of '*eating arsenic*.' The *legends* are sufficient *authority*, and are proper reasons for its employment among those ignorant and superstitious Wends and Sclavonians, educated in the static Roman Catholic faith, who inhabit the Alpine districts of Austria. As to the physical effects of arsenic,

however, as described in the foregoing extract, something more must be said. In the first place, it is in accordance with all experience, to observe the most wonderful elasticity of the animal constitution in regard to its impressibility by certain poisons. The animal body has not only laws for its development, but also for its preservation. The conservative powers are most singularly displayed under circumstances of the long continued use of various poisons. This habitual use of arsenic in Styria, and the intemperate use of tobacco, ardent spirits, opium, etc., in our own country, proves this clearly. Incredibly large quantities of articles commonly destructive, in *small* doses, are often taken with apparent impunity.

Now when on the other hand it is considered that most of the active substances thus taken, are possessed of a variety of properties, producing effects of a corresponding variety, it is not difficult to see how, even those articles whose main or paramount powers are absolutely poisonous, yet, by the display of other, and minor properties, there may also be other effects produced, in accordance to such other properties that may exist. Arsenic is primarily stimulant and tonic, and these effects of the drug *may* or *may not*, depend upon the display of its poisonous powers. It is also a powerful excitant of secretion, and causes copious effusions upon most of the mucus and serous tissues. It excites the circulation and determines to the skin. In all these effects we have explanations for what is boasted of as the kindly physiological actions of arsenic. But it is monstrous, in this age of reason and philosophy, for any man to project seriously that the physiological reactions that are provoked by an incompatible stimulant or irritant, are evidences indicating their utility. Good often incidentally comes out of evil, but that is no virtue of the evil.

If all the stimulant and tonic power, as well as its property of exciting secretion and of promoting certain specific dermoidal influences, were even of a most pure and simple, as well as specific character, still there is no well grounded argument for a preference in this drug. We are not, by any means, deficient in such agencies. Then, on the other hand, when it is remembered how these properties stand associated in arsenic, what a *risk* there is incurred in the employment of this drug, our feelings

naturally revolt, and our judgment protests, against its employment.

This practice of 'eating arsenic,' in Styria, has not now been referred to as a remarkable fact, for the first time. It had been noticed many years since, and physicians from London had given the matter some investigation about twenty years ago.

Observations had been instituted, by which hundreds of cases had been tested. The observations of Dr. FOWLER extended to 320 cases, in which the poison had been given in doses so small that in one-third of the cases, no observable effects whatever, were noted, while in the remainder, there were very many very marked evidences of its fatally poisonous character. Among other experimenters were JAGER, MARZ, MARCET, MACAIRE, VOUGHT, and at an earlier period, HAHNEMANN and CHRISTISON. All these eminent men bear the same evidence against the drug.

One thing more is noteworthy here, and that is in reference to the circumstances under which the favorable history concerning this drug occurred. These circumstances would certainly not be likely to produce any other kind of an impression. When good only was looked for, to follow this hereditary practice, whose origin was so *high* and so *remote*, *good would needs be found*.

There can be no question but that immense mischief is done by this unnatural and pernicious practice, although we learn that it is commenced with persons at early life, and is introduced by very careful graduation. But the subject can not now be here treated of at greater length, and the principles involved, in the development of either the good or bad effects of the article, must be passed without further notice. It may, however, be proper to remark, that the antiseptic power of arsenic upon the lifeless body—when employed to preserve the *cadaver*—bears no analogy, so far as yet observed, to its operation in the living body. The life state is entirely incapable of the changes of the antiseptic phenomena displayed by this article upon the dead body.

J. K.

TYPHOID FEVER—TWO PARALLEL CASES— THEIR TREATMENT AND RESULTS.

BY DR. R. MALONE, M. D., IND.

DURING the past season, two cases of equal severity occurred in this vicinity, the first of which I visited in connection with Dr. F., only as assistant council; the other was submitted entirely to my care upon my first visit.

I will now give a brief though faithful history of these cases, their treatment and terminations.

CASE I. A. M., aged seventeen years, was a young man of nervous temperament; had, previous to this attack, enjoyed good health. About the first of September the patient complained of weariness, languor and general uneasiness, slight headache, irregular alternations of heat and chilliness; tongue furred a little; appetite impaired, with a constant disposition to diarrhea.—About the 6th of September, the symptoms were more aggravated, pulse more frequent and strong, ranging from 100 to 112 per minute; skin hot and dry, tongue dry, and red at the tip; tympanitis, with pain in the right iliac region, and a gurgling sound on pressure. At this crisis, Dr. F. was called. He immediately ordered a plaster of cantharides applied to the abdomen, commanding the nurse to keep it on from 4 o'clock in the evening, until 'sunrise' the following morning. He next gave a large opium pill, to quiet the nervous agitation and check the bowels. This was followed by a cathartic:

R. *Podophillin* and *Dover's* powders aa grs. vi, divided into 3 powders, and given four hours apart. This prescription produced copious discharges from the bowels, which was followed by great prostration, tenesmus and nervous agitation.

The following day he was put upon the use of ipecac and quinine aa, in one grain doses, every two hours; also, nitrous ether and antimonial wines, aa, half a teaspoonful four hours apart. For several days this treatment was continued, with an occasional opium pill, to check the bowels. At this period I was called, in the absence of the attending physician, to mitigate, if possible, the alarming symptoms then present. I found the patient in a fit of delirium, his eyes were injected, tongue incrustated with

a dark coating, teeth covered with sordes, and the pulse feeble and frequent, sliding down towards the foot of the bed, occasionally involuntary stools, and the discharges resembled very much, both in color and substance, the tanner's ooze. I discontinued the ipecac, quinine and antimony, and ordered an infusion of Peruvian bark, with a few drops of elixir vitriol in it; also the following prescription:

R. Gelsemin, grs. iv.

Hydrastin, grs. iv.

Geranin, grs. iv.

Make powders vi; gave one every two hours. I also ordered the following enema: Starch mucilage, ℥ij., tinc. opii. gtt. x.

At this juncture, the attending physician arrived, and he said the patient would die. My treatment, however, was continued that night and when Dr. F. arrived the next day, he found his patient a little better. He pursued a similar course of treatment for a number of days, using astringent tonics, instead of irritating cathartics, and the patient was evidently doing well, but Dr. F. thought he might do better, and hence concluded to make another '*powerful impression*' on the liver. *Podophyllin* was the agent used to produce this *impression*. The consequence resulted in a return of diarrhea, and other aggravated symptoms, leaving the patient in a worse condition than before.

The Dr. attended his patient regularly for six weeks, and during this time, from *six* to *eight brisk cathartic doses* of *podophyllin* had been given; the too free and needless use of *cantharides* had produced *strangury*; the parotic gland, at the angle of the lower jaw had inflamed, supurated and sloughed, the left leg had swollen to an enormous size, and the bowels could scarcely be controlled by the most potent astringents and anodynes.—Three months have passed, and this patient is now unable to walk the distance of one mile.

CASE 2. I. P., aged thirty-five, and had generally enjoyed good health. About the 15th Sept. he was attacked with symptoms very similar to those described in the above case; indeed all the premonitory symptoms noticed above, were present in this case.

After the lapse of eight days from the time he was attacked, he sent for me, and upon my arrival, I found a well marked case

of typhoid fever. The following symptoms were present: Pulse strong and frequent, skin hot and dry, tongue dry, and red at the tip; tympanitis with pain and swelling in the right iliac region, and a gurgling sound was heard on pressure, subsultus tendenum, and sudamina present. Upon inquiry, I found, as in the above case, a disposition to diarrhea from the beginning; and notwithstanding this, he had taken three active cathartics previous to the time I was called.

Treatment.—Believing the plain indications in this case were, to eliminate or neutralize the morbid poison in the system, and remove the gastro-intestinal inflammation of the mucus surface, and of the glands of Peyer, I ordered the following treatment:

R Myrcin	} aa vi.	M.
Hydrastin		
Geranin		

Make powders viij, and give one every two hours; and at the same time give three tablespoonsful of a decoction of the following articles; Cypripedium and eupatorium, aa 3ss. hot water Oj. The febrile reaction being high, the patient was immediately placed in the cold saline pack, where he was permitted to remain until free perspiration was induced, which occurred in about two hours. The pack was then removed and the surface rubbed briskly with a coarse cloth; and after the patient had been placed in bed with a heated stone to his feet, a large cataplasm, composed of pulv. ulmus, lobelia and a little flour of mustard was applied over the right hypochondrium. To soothe the disturbed condition of the bowels, I recommended the following enema: Starch mucilage, 3iij. Quinine and iron, equal parts, were now given in two-grain doses, four hours apart, and nitrous ether and gelseminum aa, thirty drops every four hours. The following evening, fever returned; he was again placed in the saline pack, and that followed by the treatment prescribed above.

The third day I learned that the patient's bowels had not been moved since I first saw him; in order, therefore, to get up a gentle action on the bowels, I gave him two grains leptandrin, and three hours after, followed it with a small dose of castor oil and turpentine; this produced a very good effect. On leaving the patient, I left orders to apply the pack again if fever returned,

and in case the fever should not come up very high, to have him sponged with tepid alkaline water. On my return the fifth day, I found the patient quite comfortable. Fever had not come up, had had a natural discharge from the bowels, the pain and swelling in the right side had nearly subsided, the tongue cleaning off and becoming moist. I now recommended the following: Peruvian bark, cypripedium aa 3ss., hot water Oj., two table-spoonsful of the liquid given every two hours. One of the following powders was given every four hours: Hydrastin, Cornin, aa, grs. x. Make powders x.

On the ninth day found the patient still improving, recommended farinaceous diet, beef tea, etc., and discharged him.—Three weeks from the time I saw him first, he was able to be about his business.

The too free and indiscriminate use of *drastic cathartics*, and other *irritating drugs*, can not, in my judgment, be too severely condemned by medical philosophers.

TRUE AND FALSE CROUP.

THE former is treated of and recognized by the terms *Stridulous Laringitis*; *Spasmodic Laringitis*; *Stridulous Angina*; *Catarrhal Croup*; *False Croup*, and *Spasmodic Croup*. The latter term is improperly used in its application to the milder form alone, because they are both more or less spasmodic in character, in consequence of which, the term does not aid the student and practitioner of medicine in his diagnosis; but on the contrary, tends to commingle and blend in the mind of the observer, the milder with the more dangerous form of the malady.

The latter is known by the terms *Pseudo-membraneous Laringitis*; *Laryngeal Diphtheritis*; *Pseudo-membraneous Pharyngo Laringitis* or *True Croup*. A malady, though rare compared with the former, is nevertheless almost as fatal as it is frequent in occurrence. It is to this form that the European writers have applied the term *Croup*, which explains, in part, the greater mortality on the other side of the Atlantic, than on this.

To aid in the diagnosis of the graver malady, when presented,

from the milder, the following parallel is drawn, with a view to present at a glance the most essential and important symptoms found in each, so that the one may not be confounded with the other :—

FALSE CROUP.

It is not uncommon for symptoms of catarrh to usher in the disease, such as coryxa, bronchial irritation, sore throat, cough, and in some cases fever.

It may appear suddenly, and generally after sleep.

The voice becomes hoarse, but it does not assume the whispering sound.

The cough is boisterous and hoarse.

Occurs in paroxysms, and when over, the little sufferer appears comparatively well.

Fauces but slightly if at all affected; false membrane never found.

It is but seldom that it continues longer than two days.

But seldom fatal.

TRUE CROUP.

Catarrhal symptoms are but seldom present.

Comes on insidiously, and the paroxysms may appear either in the night or day.

The voice soon becomes hoarse, weak, and reduced to a whisper.

The cough is frequent and hoarse in the early part of the attack, but soon becomes short and smothered.

There is no remission of the symptoms, but they gradually, though steadily, become worse.

False membrane can be seen in a majority of cases on or about the tonsil glands.

Duration from two to eight days.

In a majority of cases it proves fatal. W.

MR. DALLAS, of Odessa, states, in confirmation of the observations already published by TADDEL, MARCHAL, and others, that the injection of the balsam of copaiba is the most efficacious mode of treating gonorrhea :—In sixteen cases he has so employed it, using no internal remedy, either in recent or old gonorrhea, with complete success. His formula is, copaib., five drachms; one yolk of egg; gummy extract of opium, one grain; water, seven ounces. The injection should be used several times a day. —*Gaz. des. Hopitaux.*

CHEMISTRY OF FOOD.

(CONTINUED.)

HYDROGEN.—In nature, hydrogen is never found uncombined. It is a constituent of water, and exists in various states of combination in all vegetable and animal tissues. In its free state, it is the most highly attenuated of all known forms of matter. It is sixteen times lighter than common air, one hundred cubic inches weighing only 2.13 grs., while an equal volume of air weighs 31.011 grs.

Hydrogen is colorless, tasteless, inodorous and irrespirable. Considering its low specific gravity, its refractive power is greater than that of all other bodies. Its index of refraction is nearly equal to that of oxygen, which is sixteen, and of common air, which is fourteen times as heavy.

PEREIRA, divides alimentary principles into three classes, based upon the proportion of hydrogen contained in them.

1. Principles containing hydrogen and oxygen in the same ratio as in water.

2. Principles containing an excess of hydrogen.

3. Principles containing an excess of oxygen.

The following are among the most important members of the first class, viz :

Acetic Acid,	=	$C^4 H^4 O^4$
Starch,	=	$C^{12} H^{10} O^{10}$
Gum,	=	$C^{12} H^{10} O^{10}$
Cane Sugar,	=	$C^{12} H^{11} O^{11}$
Milk Sugar,	=	$C^{12} H^{12} O^{12}$
Grape Sugar,	=	$C^{12} H^{14} O^{14}$

These and similar compounds may be considered as hydrates of carbon, i. e., compounds of water and carbon; and as the oxygen is already in combination with hydrogen, the carbon remains to be oxidized in the system. As there is no free hydrogen to combine with inspired oxygen, the carbon unites with it, forming a volume of carbonic acid, equal to that of the oxygen itself. Chemistry has demonstrated that the volume of carbonic acid is in all cases equal to that of the oxygen contained in it. (See SILLIMAN'S Chemistry, § 346, page 220.) This explains

the fact mentioned by LIEBIG, (Organic Chemistry, page 26,) 'that graminivora expire a volume of carbonic acid equal to that of the oxygen inspired, while carnivora, the only class of animals whose food contains fat, inspire more oxygen than is equal to the volume of carbonic acid expired.' When there is an excess of hydrogen, a portion of the oxygen, which at the temperature of the body has a stronger affinity for it than for carbon, unites with it, forming water, and the volume of carbonic acid expired is less than that of oxygen inspired, by the amount thus consumed. This will appear more fully when we consider the next class, viz.:

2. Principles containing an excess of Hydrogen.

Fat, (Empirical formula)	=	$C^{11} H^{10} O$
Alcohol,	=	$C^4 H^6 O^2$
Proteine,	=	$C^{40} H^{30} N^5 O^{12}$
Albumen, Fibrine, & Caseine,	=	$C^{48} H^{36} O^{14} N^6 + S P^*$
Gelatine,	=	$C^{13} H^{10} N^2 O^5$

As in these and similar compounds, there is an excess of hydrogen, which in no case leaves the system unassimilated, and as the changes which these substances undergo, whatever may be the immediate steps of the process, result finally in their conversion into carbonic acid and water, it is evident that a considerable amount of heat must result from their oxidation. So far as this results from the consumption of carbon, it has already been noticed. The union of hydrogen with the oxygen of the atmosphere, or of food, when compared with that of carbon, weight for weight, greatly exceeds it in calorific power. According to DESPRETZ, one pound of hydrogen yields, when burned with oxygen, sufficient heat to raise 236,4 lbs of water, from 32° to 212° Fahr. The combustion of hydrogen, then, is manifestly an important source of heat, in all carnivorous animals. In nearly all cases, experimenters have noticed in such animals, and in man, some loss of atmospheric oxygen in the respiratory process, and there can be little doubt that the loss is the result of a combination of the missing oxygen with hydrogen, and the consequent production of water. It is worthy of remark that alimentary principles belonging to this class, include both nitrogenized, and non-nitrogenized bodies.

*The symbols, S P, represent small and indeterminate quantities of Sulphur and Phosphorus.

3. The third class is mainly composed of principles found in the juices of fruits and vegetables.

Pectine.

Citric acid, = $C^{12} H^8 O^{14}$

Tartaric Acid, = $C^8 H^6 O^{12}$

Malic Acid, = $C^8 H^6 O^{10}$

These and similar substances are considered antiphlogistic in their effects upon the animal system, and we may easily account for their being so, when it is remembered that all their hydrogen and a portion of their carbon are already oxidized, and the excess of carbon is the only heat-producing agency in them remaining unconsumed. G.

MECHANICAL DYSMENORRHŒA.

IF now, after taking all possible care to avoid mistakes, you will come to the conclusion that the painful menstruation is, in part, if not altogether, due to the narrow cervical canal, I think you find a set of flexible metallic bougies, the best and most convenient means for dilating the passage. Those which I use, correspond in size with the sounds employed by surgeons for examining the bladder; but I have had a notch made at two and a half inches from the extremity, in order to be able to tell how far the instrument has been introduced. Five or ten minutes, are, I think, as long a time as it is desirable to allow the bougies to remain; but they should be introduced daily, and their employment should not be discontinued until the canal admits one corresponding to the ordinary No. 9 bougie. If after frequent attempts, the bougie can be introduced only a short distance, a prepared sponge tent, such as Professor SIMPSON was the first to bring into use, should be introduced, and then a larger, and still larger, till in the course of a couple of days the cervix will be widely dilated throughout; or else we shall find the point at which a decided impassable contraction exists. In the only case in which I discovered this state of things, the patient's sufferings dated from a severe confinement, and the stricture close to the os uteri would not allow the passage of the smallest catgut bougie.

In this instance, I employed STAFFORD'S instrument for dividing impermeable urethral stricture; and the result of this proceeding, and of the subsequent introduction at first of sponge tents, and afterwards of metallic bougies, to keep the passage pervious, was in the highest degree satisfactory.

In no other case, however, has the employment of a cutting instrument for widening a narrow cervix uteri, appeared to me either necessary or proper.—*Medical News*.

SPENDER'S CHALK OINTMENT IN ULCERS OF THE LEG.—Dr. Patterson has collected one hundred and twenty-five cases of chronic non-specific ulcers of the leg, in which, under this mode of treatment, the cure has been rapid and complete. The following formula he prefers: *R.* Cretæ prepatatæ, lbiv.; olei olivæ, oz. iii. Having heated the oil and lard, add gradually the chalk, finely powdered.

The ointment and a bandage being once applied, it is left until the cicatrix forms and becomes firm.—*Edinburgh Medical Journal*.

BELLADONNA A LACTIFUGE.—The *Memphis Medical Recorder* says that the secretion of the mammary glands may be removed in early or late lactation by the extract of belladonna, in the form of a plaster, or solution, applied to the surface. In mammary abscess, loss of a child, and weaning, the remedy will be of service.

DIGITALIS.—In menorrhagia, this herb in infusion, by the Dublin Hospital, has stopped the flow in seventeen successive cases. Dose of the infusion, an ounce to an ounce and a half.

CUTANEOUS DISEASES.—Traumaticine, the solution of gutta percha in chloroform, Dr. ULENBURG, of Berlin, has used successfully in treating psoriasis and chronic eczema, applied perseveringly.

TO REMOVE RUST FROM STEEL.—Cover the steel with sweet oil well rubbed on. In forty-eight hours, rub with finely pulverized unslaked lime, until the rust disappears.

IMPORTANCE OF DIAGNOSIS.

I KNEW a physician to apply warm poultices to a strangulated (inguinal) hernial tumor, until suppuration occurred in the tumor, which was opened, and immediately, as might have been expected, a perforation of the intestine took place, which was followed by peritoneal inflammation and death, under the impression that it was superficial *abscess*. The first question I propounded to the patient when I was called, and after the mischief was done, and the answer to the same, left the attending physician without an excuse for his neglect. 'Has not this tumor appeared several times before and then suddenly disappeared?'—The answer was, 'it has.' The attending physician remarked, 'why I did not know that before.' I remarked to him that he would probably never poultice another tumor in the same place again without propounding the question I had to the patient. He thought he should not. He doubtless learned something from the case, but it was rather a costly lesson to the patient and her friends.

Such errors in diagnosis are sometimes as ridiculous as they may at other times be fatal. I knew the case of a female who was in a state of *dementia*, that had a large quantity of feces impacted into the rectum, making a tumor as large as the head of a full grown fetus, which would scarcely admit of the passage of the index finger between it and the pubic bone, and who, by showing symptoms of pain in her effort to expel it, was supposed to be in travail. A young physician was sent for, who, believing the story of the old lady, made but a slight examination of the case, but sat down for twelve hours and 'waited for pains.' The family getting anxious for the child to be born called an older physician to the patient. He, I am sorry to say, made an examination and pronounced it a genuine case of *super fætation*. The attorney was forthwith sent for, and the girl made to swear the child upon a very respectable man, in whose family this girl had lived as maid. I was then sent for to perform the operation of removing the child, as is in such cases 'made and provided.' By placing the patient in a proper position for examination, and merely introducing my finger into the

rectum, I unlocked the wonderful mystery of the case, relieved the family of what they supposed to be forthcoming, viz: an illegitimate addition to the family, the imputed father, of the crime of adultery, the patient of a very serious operation, and the community of a tremendous excitement, though the sport had at the attending and first consulting physician's expense, seemed more than to compensate the public for the extreme solicitude they had entertained, in behalf of the patient, in view of her 'critical' condition. In the absence of the least external appearance of pregnancy in this case, one would have supposed that both or either of the two physicians called, would have ventured an examination per anum, especially as the 'child's head' evidently had not any elasticity in it, but could easily be indented by the pressure of the finger.

A lady with her attending physician came some twelve miles to consult me in respect to what the physician said he 'supposed' was a 'bad case of prolapsus of the uterus.' The patient had been under his care 'all summer,' taking medicine and 'wearing an abdominal supporter.' I inquired of the physician in respect to the ordinary position of the uterus, and was told that he 'did not know,' as he had never 'made an examination.' I thought it was time an examination was made, made one, and found a very large polypus uteri, projecting through the labii externus, portions of it sloughing, producing a very offensive smell, which I should have supposed would have reached the nose of the lady's physician, if he was too modest to make an examination.—I removed the polypus, and took off the abdominal supporter, and the patient got well.—*M. Reformer.*

AUTOMATIC OVUM.—Mr. BERDAN, of New York city, has lately invented, and put in operation in the city of Brooklyn, an Automatic Ovum, by which 100,000 loaves of bread may be made and baked in a single day. By the ordinary method of making and baking bread, a single barrel of flour, when made into bread costs \$8., but by the Automatic Ovum, it costs but \$1. The invention saves seventy-five per cent. of fuel; it also saves ninety per cent. of labor; it enhances the nutritive properties of bread twenty per cent., by preventing the escape of the

spirituous elements of the fermented loaf; and all pernicious ingredients are prevented from being mixed with the flour by unreliable bakers. If the invention is what disinterested examiners of it report, it will work a valuable reform in the 'staff of life,' and prove a great prophylactic. Good bread in the reach of all, at all times, will greatly interfere with the pill business.

LIABILITY OF THE UTERUS TO DISEASE.

It would not be easy to imagine a state of things more favorable to the occurrence of ailments dependent on venous congestion, or in which those ailments would be more difficult to remove, or more apt to return, than is observed in the case of the uterus during the whole period of activity of the generative powers. The return of blood from the organ, which is rendered difficult by its situation at the lower part of the trunk, is still further impeded by the absence of valves from its veins; while every month, for several days together, this organ and its appendages are the parts towards which blood flows in superabundant streams. During this period, the natural secretion from the uterus and Fallopian tubes is much increased; the epithelium covering their surface is detached, and reproduced again and again; hemorrhage breaks out along the whole tract—and it is not until this has continued for some days that the congestion ceases, and the parts subside once more into their former state of quiescence—the uterus remaining, however, for a short time heavier, and its tissue looser, and more abundantly supplied with blood than it was before. I need not stop to tell how a slight cause may protract this hemorrhage, or how some accident may check it, nor need I labor hard to prove that in either case there must be a general disturbance of the functions of the organ—a general impairment of the health of the individual; exhausted in one instance by loss of blood, broken down in the other by the suffering, both general and local, which the return of the periodical excitement of the generative organs, unrelieved by their customary depletion, can not fail to bring with it. In what organ of the body does one find a parallel to this series of occurrences?

Again: the uterus is held in its position by supports which al-

low to it a large measure of mobility, and whose power is generally diminished by the very causes that increase the weight of the body they have to bear. Hence it is very apt to become displaced, and to be displaced in a downward direction, or prolapsed. And such prolapsus not only brings with it a variety of painful sensations, due to the womb dragging upon its ligaments, but the moment the organ ceases to be suspended in the pelvic cavity, it becomes exposed to shocks of various kinds, to irritation from sources from which it was previously safe. The neck of the womb, even when that descent is not very considerable, becomes a sort of stem upon which the organ rests upon the floor of the vagina. In this position it is liable to disturbing causes almost numberless; sitting, riding, exertion of any kind, the very passage of the feces along the rectum, produce pain, keep up congestion, and favor that slow increase of size which seldom fails to occur in parts the seat of long continued irritation, and which offers one great impediment to the cure of many affections of the womb.

Another peculiar and fertile source of disorders of the womb is furnished by the changes that attend upon conception and parturition, and their frequent interruption. With these changes, even in the healthy state, our acquaintance is at present too imperfect for us to appreciate with accuracy the nature of the mischief which may result from their disturbance. We know, indeed, many things concerning these processes of which our predecessors were ignorant; but our increased knowledge is as yet sufficient to show us the difficulties of the problem—not sufficient to furnish its solution. The growth of the pregnant womb is not as it was once supposed to be, a mere increase in size and unfolding of texture of the muscular fibers already present there, but is as much the result of a new formation as is that of the foetus contained within it; its tissues going through the same development from a rudimentary condition to a high organization. Cells elongate into caudate bodies, then unite into fibrillæ, while the mucus membrane increases in vascularity, grows in thickness, and becomes developed into decidua. The small, dense, lowly organized uterus becomes the large, vascular, powerful muscle which we see it to be at the end of pregnancy; when having served as the residence of the fetus, and as the medium through

which it derived its support, the organ accomplishes in the act of parturition the last of that wonderful series of processes of which for forty weeks it has been the center. But even before this period has arrived, indications of decay have manifested themselves in the changes that have taken place in the decidua; while no sooner is the child born than all the tissues of the womb evince the commencement of similar alterations, which go on with a rapidity such as is observed in no other organ, and in no other circumstances. The muscular fibers undergo fatty degeneration, and to a great extent disappear; nerve-matter ceases to be apparent within the sheaths which had contained it, while even the fibers of elastic tissue interwoven with the muscular substance of the womb lose their distinctness, or become entirely absorbed. The old uterus has done its work and is removed; but in the midst of its decaying fibers the elements of a new organ are developed, and the microscopist tells us of a new generation of spindle-shaped cells which he can discover in its tissue, just like those which existed in the organ before pregnancy began, and which remain stationary at the same low stage of formation, till in their turn excited by impregnation to go through higher phases of development.

In these changes, the body of the uterus, and the lining of its cavity, bear a far greater part than either the substance of its cervix, or the mucus membrane which lines that canal. The mucus membrane of the body only is developed to the decidua, and it alone is thrown off after delivery; the lining membrane of the neck undergoes much slighter alterations, and is not deciduous. It is in the body of the uterus that its muscularity is most evident; firm fibro-cellular tissue predominates in the cervix, with which are interwoven here and there bundles of narrow, smooth, muscular fibers; and the stimulus of pregnancy which works such changes in the former situation, brings to pass far slighter alterations in the latter.—*Medical News*.

BUCHU.—Dr. H. HANCOCK, late surgeon in the English army, has treated within the last year over one hundred cases of Gonorrhea, successfully, with the infusion of Buchu. No local application except in chronic cases.—*London Lancet*.

UTERINE INFLAMMATION.

ONE result of inflammation succeeding to miscarriage or delivery is to *check that process of involution by which the womb ought to be restored* in a few weeks to the size and condition which it presented before pregnancy began. If you examine the body of a woman who died of uterine inflammation after delivery, one of the first things to arrest your attention will be the large size of the womb, which after the lapse of four or five days, will be found to be as large as the healthy womb when only twenty-four or thirty-six hours have passed since the completion of labor. This increased size of the uterus, too, is not due simply to its natural contractions being arrested, nor to the unusual afflux of blood towards it, nor to the effusion of the products of inflammation into its substance, though possibly all of these causes may in various degrees contribute to it; but is in a great measure owing to the mere suppression of those changes which ought to occur after delivery, and with whose nature the microscope has made us in some measure acquainted. In a perfectly healthy condition, a large amount of the blood previously supplied to the uterus, is at once cut off by the powerful contractions which either completely close the vessels distributed through its substance, or at any rate greatly diminish their caliber. Its tissue having performed the function for which it was raised during pregnancy to so high a degree of development, undergoes, as other tissues do previous to removal, a process of degradation or fatty degeneration; and having thus become more readily susceptible of removal, is either absorbed, or is discharged with the lochia from the interior of the womb. For some three or four weeks, little else goes on besides this process of degradation and removal; and this is much more active during the second week* after delivery, than either before or after that period. There next, however, begins a process of reconstruction of the organ; and nuclei, and caudate cells, and elements of new fibers are formed, which await only the stricture as was manifest in the former uterus.

*According to HESCHL, "Wiener Zeitschrift," and SCHMIDT, "Jahrbucher," vol. lxxvii., 1853, p. 341.

Observers are not altogether agreed as to how soon this reparative action begins; whether it is quite secondary to the removal of the elements of the old uterus, or whether, as seems indeed most likely, removal of the old and construction of the new go on actively at the same time. The interior of the uterus undergoes changes as considerable as those which take place in its substance; and it is not until its lining membrane, with the exception of that of the cervix, has been several times reproduced and then cast off in a state of fatty degeneration, that it resumes the same condition as before impregnation.*—*Medical News*.

CLINICS IN THE COMMERCIAL HOSPITAL.

IN the Medical Department, during the early part of the month, inflammation and its terminations, including tubercular deposits, were discussed by Prof. ARMOR, in his peculiar, clear and impressive manner. At a subsequent period, the mode of detecting disease in the thoracic cavity, by percussion and auscultation, was dwelt upon at length. The various sounds were explained, the normal as well as the abnormal.

A case of more than ordinary interest was presented in a young man of over twenty years of age, laboring under Bright's disease of the kidney. The most approved mode of treating such cases was instituted, but to no effect. The urine was tested with nitric acid; a white, milky, precipitate was the result, proving conclusively that albumen was there in abundance. Another interesting and very instructive case: a young man passing out of boyhood, the subject of abdominal dropsy, the sequel of intermittent fever. While before the class, the various causes of dropsy were alluded to in their application to the case under consideration.

*The best microscopic observations on this subject, are those of the late FRANZ KILIAN, in HENLE'S "Zeitschrift," vol. viii. p. 53, and vol. ix. p. 1, with which those of HESCHL, loc. cit., generally correspond, though there are some differences between their statements in points of detail. Dr. SIMPSON was, I believe, the first to call attention to the practical bearings of the subject. See his "Contributions to Obstetric Pathology," vol. i. p. 26.

In the surgical department, numerous very instructive cases, have from time to time been presented; quite a number of whom were the subjects of hip-joint disease, varying from the simple to the graver forms of that malady. A mode of treating them locally, instituted by Dr. BLACKMAN, after inflammation has subsided, is to apply the white-hot-iron to the parts, with a view to establish in the vicinity of the joint a suppurating surface. This mode has been resorted to in many cases, from the commencement of the session to the present time, with marked benefit. The patients, before its application, were brought under the influence of a mixture of chloroform and ether. An emollient cataplasm was applied to the parts after the application of the actual canter. In nearly all these cases, a rich and nutritious diet was recommended; such as beef-steak, ale, porter and egg-nog, with but little medicine.

A number of scalded patients, were presented, several, severely so. The local application relied upon, and generally used, in the Commercial Hospital, is white lead. It was stated that the lead is but seldom, if ever, absorbed when used in this manner.

Prof. GRAHAM had an opportunity to present his views, which are somewhat peculiar. He stated in his remarks, that there appeared to be a link in the chain wanting in the treatment of this malady, which he proposed to supply. In very bad cases, he had noticed a partial suppression of urine, and the general symptoms presented by such cases correspond with those found in cases of *anuria* which led him to conclude that such symptoms should be met with diuretics, with a view to remove them, by re-establishing the renal discharge. He sustained his views by a few pointed and appropriate remarks.

Early in the session, a female was presented with contraction of the flexor tendons of the fingers, the result of rheumatism. The hand was very much distorted, and useless from the adhesions which had taken place between the tendons and the parts adjacent. She was brought under the influence of the anesthetics heretofore alluded to, the adhesions broken up, by alternately extending and flexing the fingers. After the adhesions had been completely broken up, the fingers were bound down to a convex body, and retained in that position by a roller applied round them, and treated somewhat after the manner of a fracture in-

volving one or more of the phalanges. Others were presented in which the knee-joint was involved, brought about either by position or disease. Sufficient force was applied to break up the adhesions, after which the limbs were bound down to splints, and retained in an extended position. Several cases are now under going treatment, the result of which it is our purpose to notice, at some future period. In one or two instances, marked benefit has been the result, with a prospect of a final restoration of the limbs to their natural position and usefulness.

The last case we propose to notice at this time, is a female verging on her thirtieth year, an out-door patient. When introduced to the class, she was troubled with a severe pain in the the sternum, which was increased by slight pressure, but it became more tolerable by continuing the pressure firmly. This, and other symptoms, led the surgeon to the conclusion that it was of a nervous character. The prescription was equal parts of the tincture of aconite and chloroform, to be applied locally; and with a view to clean out the prime vie and meet the derangements of the sexual system, if any, the compound aloetic pill of the U. S. Dispensatory, was prescribed. She returned the week following, much improved.

W.

VERATRUM VIRIDE.—Dr. J. SIDWELL, of Georgetown, Ohio, will, in the next No. of the *Journal*, give to its readers his views of, and experience with, this recent remedy. As an anti-febrile, he says it far surpasses all other agents known. He claims for it great power and safety in regulating the action of heart, arteries, capillaries and veins, when excessive. The profession certainly demands a potent, reliable and convenient remedy for the regulation of excessive circulatory action.

DENARCOTIZED OPIUM.—The above gentleman also speaks most favorably of the efficacy and sanativeness of this preparation of the poppy. It is, he says, all he wants of an annodyne—perfectly reliable for power, and for physiological tendencies. A paper on this article may be soon expected from Prof. KOST.

RESEARCHES IN PHYSIOLOGY AND PATHOLOGY.

BY E. BROWN-SEQUARD, M. D.

I. I have found that the following kinds of injury to the spinal cord are able to produce epilepsy, or at least a disease resembling epilepsy, in animals belonging to different species, but mostly upon guinea-pigs.

1st. A complete transversal section of a lateral half of this organ.

2d. A transversal section of its two posterior columns, of its posterior cornua of gray matter, and of a part of the lateral columns.

3d. A transversal section of either the posterior columns or the lateral, or the anterior alone.

4th. A complete transversal section of the whole organ.

5th. A simple puncture.

Of all these injuries, the first, the second and the fourth seem to have more power to produce epilepsy than the others. The first particularly, *i. e.*, the section of a lateral half of the spinal cord, seems to produce constantly this disease in animals that live longer than three or four weeks after the operation. After a section of either the lateral, the anterior or the posterior columns alone, epilepsy rarely appears, and it seems that in the cases where it has been produced, there has been a deeper incision than usual, and that part of the gray matter has been attained. In other experiments, few in number, the section of the central gray matter (the white being hardly injured) has been followed by this convulsive disease. I have seen it but very rarely after a simple puncture of the cord.

It is particularly after injuries to the part of the spinal cord which extends from the seventh or eighth dorsal vertebra to the third lumbar, that epilepsy appears.

II. Usually this affection begins during the third or fourth week after the injury. In some cases I have seen it beginning during the second week, and even one or two days before. At first the fit consists only in a spasm of the muscles of the face and neck, either on one or the two sides, according to the transversal extent of the injury. One eye or both are forcibly shut,

the head is drawn towards one of the shoulders, and the mouth opened by the spasm of some of the muscles of the neck. This spasmodic attack quickly disappears.

After a few days the fit is more complete, and all parts of the body, which are not paralysed, have convulsions. According to the seat of the injury, the parts that have convulsions greatly vary. When the lesion is near the last dorsal vertebræ or the first lumbar, and consisting of a section of a lateral half of the spinal cord, convulsions take place everywhere, except only the posterior limb on the side of the injury. If the lesion consists of the section of the two posterior columns and a part of the lateral columns, and of the gray matter, convulsions take place everywhere without exception, but with much more violence in the anterior parts of the body. When the lesion exists at the level of the last dorsal vertebræ, and consists in a transversal section of the two anterior or of the two lateral columns, convulsions are ordinarily limited to the anterior parts of the body; but it is a very interesting fact that they are not always confined to these parts, the two posterior limbs having sometimes very strong tetanic spasms, at the same time that there are clonic convulsions in the anterior limbs. After a transversal section of the central gray matter, or of the whole spinal cord, in the dorsal region, convulsions are limited to either the anterior or the posterior parts of the body.

III. Convulsions may come either spontaneously, or after certain excitations. The most interesting facts concerning these fits is, that it is possible, and even very easy, to produce them by two modes of irritation. If we take two guinea pigs, one not having been submitted to any injury of the spinal cord, and the other having had this organ injured, we find, in preventing them from breathing for two minutes, that convulsions come in both; but if we allow them to breathe again, the first one recovers almost at once, while the second continues to have violent convulsions for two or three minutes and sometimes more. There is another mode of giving fits to animals which have had an injury to the spinal cord. Pinching of the skin in certain parts of the face and neck, is always followed by a fit. If the injury to the spinal cord consists only in a transversal section of a lateral half, the side of the face and neck, which, when irritated, may

produce the fit, is on the side of the injury; *i. e.*, if the lesion is on the right side of the cord, it is the right side of the face and neck which are able to cause convulsions, and *vice versa*. If the two sides of the cord have been injured, the two sides of the face and neck have the faculty of producing fits when they are irritated. No other part of the body but a portion of the face and neck has this faculty. In the face, the parts of the skin animated by the ophthalmic nerve, can not cause the fits; and of the two other branches of the trigeminal nerve, only a few filaments have the property of producing convulsions. Among these filaments, the most powerful, in this respect, seem to be some of those of the suborbital and of the auriculo-temporalis. A few filaments of the second, and perhaps of the third cervical nerves, have also this property of producing fits. In the face, the following parts may be irritated without inducing a fit: the nostrils, the lips, the ears, and the skin of the forehead and that of the head. In the neck, there is the same negative result when an irritation is brought upon the parts in the neighborhood of the median line, either in front or behind. On the contrary, a fit always follows an irritation of some violence when it is made in any part of a zone limited by the following four lines: one uniting the ear to the eye; a second from the eye to the middle of the length of the inferior maxillary bone; a third which unites the inferior extremity of the second line to the angle of the inferior jaw; and a fourth which forms half a circle, and goes from this angle to the ear, and the convexity of which approaches the shoulder.—*Boston Journal*.

A CEMENT, which gradually becomes as hard as stone, may be made by mixing twenty parts by weight of clean sharp sand, two of litharge and one of whiting, and making them into thin putty with linseed oil. For seams in roofs, it may be formed of white or red lead, thinned with linseed oil, and dry sand added.

STRANGULATED HERNIA.—Mr. SENTIN, eminent surgeon of Brussels, reduces this form of hernia, by first *tearing* with his fingers the ring that incarcerates the intestine.

Editorial.

THE JOURNAL.

THE satisfaction of the expectations of the subscribers to Dr. POTTER's *Journal*; an opportunity for the presentation of the claims of the A. M. College; a medium for the announcement of the experience of the eclectic in practice, the progressive in investigation, the tolerant in association, and the philosophical in aim; and a monthly presentation of the advance views of the profession, with what the practitioner needs and demands, were the motives which actuated the conductors of the *A. M. Journal* in its establishment.

Thus far the *Journal* has been favorably received by those to whom it has been sent. The present and past students of the College came readily and cordially with means to the sustaining of the *Journal*. They are its warm and efficient friends. The early friends of the College and the firm supporters of medical toleration and medical liberty, have been equally careful and provident of the *Journal*. And those to whom it has been sent gratuitously, according to announcement, receive it with satisfaction, and announce their patronage to its future volumes.

For all this voluntary patronage, cordial recommendation, appreciation, and satisfaction, the Proprietors feel truly thankful, and will make increased efforts to induce and to justify the continuance of such favors.

While much has been done for the *Journal* by its fast friends, and while the Proprietors gratefully acknowledge it, they would suggest to all the recipients of it, especially to the 'free list' of subscribers, the propriety of each one making an effort, during the coming month—the opening of the new year—for an additional *paying* subscriber. The number of present subscribers doubled, will render the *Journal* self sustaining—will free the Proprietors of all pecuniary responsibility, and will place it upon a firm and reliable basis. All that is necessary for the accomplishment of so desirable an object, is for *each* subscriber to obtain *one paying* subscriber, as a New Year's Present to the

Journal. Let each recipient of this No. but send us *one* new name during the month of January, with *one dollar*, and the *American Medical Journal* will be placed beyond the reach of want—will be made self-sustaining, and by it liberal medicine will have an independent organ.

SPRING SESSION.

THE eighth Course of Lectures in the AMERICAN MEDICAL COLLEGE, will commence on Monday, 23rd day of February, 1857, and continue fourteen weeks. This institution has been regularly advancing in patronage from its incipency, and is now permanently established in the confidence of the community. Some of its early friends, in view of the apparent competition, had not anticipated a career so successful. But in this case, as in all others of a similar character, where those conducting the enterprise make it their entire purpose to merit the confidence and patronage of the public, rather than to attempt to throw hindrances in the way of competitors, they have eminently succeeded.

Being at peace with all others, this College, like a State with a peaceful foreign policy, finds time for internal improvement, and for securing all the physical and moral elements of greatness and virtue, instead of exhausting resources in providing means for aggressive warfare, or for defense.

The cabinets and means of instruction in the American College, which are already larger and more valuable than those of any other Reformatory College, are now to be still much more improved, so that students repairing hither for instruction, may reasonably expect to have the best facilities for gaining collegiate and clinical instruction attainable in the country.

The Spring Sessions, in some particulars, offer advantages over those of the Winter. These advantages pertain more particularly to Botany, in which there are better opportunities for practical observations. Some of the experiments in Chemistry are also finer, in warm and dry weather than in cold and wet.

When a Spring Session commences as early as this, here announced, there are also still ample opportunities for dissection.

No season could be more convenient for attendance at College, by those who are in practice, than that of spring, for the months

of April and May are the most healthy of the year, and admit best the absence of the practitioner.

May it not be hoped that the friends of a liberal and scientific reform in Medicine will continue their labor to fill the halls of the AMERICAN COLLEGE, where Medicine is taught as resting on a natural basis, and as requiring only innocent measures of Therapeutics; while, on the other hand, the mind of the student is left untrammelled and free.

The science of Medicine, though it may be perfect in its principles, is yet progressive in its art; and hence it is often to the advantage of the old practitioner and the graduate to attend sessions at colleges occasionally, where the teachers are industrious, practical men, who keep pace with the art in its most rapid advances.

The usual terms offered for such attendance by graduates, being only the Matriculation Fee, is certainly sufficiently accommodating.

The Clinical advantages of the Commercial Hospital are the same in the Spring as in the Winter Session.

ASTRINGENTS.—The extreme facility with which tannin precipitates gelatinous matters, gives a clue to the medicinal action of astringent drugs on the human organism. They at once form insoluble compounds, (for tannin acts similarly on the protein compounds,) and do not enter the blood; and this is the reason of their being comparatively innocuous. According to MULDER a less amount of tannin than is contained in one ounce of cinchona bark, would, if conveyed into the blood, cause instantaneous death.—*Simon*.

FECAL ODOR.—Albuminous compounds, when heated with solid hydrate of potash, and the heat continued until the greater part or the whole of the nitrogen has been dissipated as ammonia, and hydrogen begins to be given off, the residue, when supersaturated with dilute sulphuric acid, and distilled, yields a liquid containing ascetic and butyric acids, and an odor in a very intense degree characteristic of fecal odor. The odor varies according to the substance employed. And in this way all varieties of fecal smell may be obtained. The fecal matter is the

product of imperfect oxidation of albuminous substances, during this disintegration. Fecal matter differs from substances in a state of fermentation or putrefaction; in fact, when exposed to air, it then undergoes fermentation and putrefaction, and then its peculiar odor disappears. The action of the potash at a high temperature, upon albumen is an imperfect combustion.—*Liebig*.

The inference then is, that the proper intestinal secretion is an imperfectly oxidated albuminous compound, occurring during the retro-gression of the tissues. The specific structures for its elimination are supposed to be Peyer's glandules, located in the lower portion of the Ileum. This conjecture is strengthened by the fact, that when the glandules are interfered with by inflammation, the characteristic order of the feces is absent. Albumen, in the incipient state of putrefaction, is eliminated by the lungs and by the skin, while imperfectly oxidized albumen is removed from the blood by Peyer's glandules.

CHLOROFORM AN ANTI-PERIODIC.—Dr. DALTON, of Ohio, in a severe case of congestion, gave two drachms of chloroform with half a grain of morphine. The patient soon fell asleep, the pulse that was imperceptible at the wrist, became full and soft, and in a short time the patient awoke, feeling perfectly well, wholly relieved, circulation established, and the paroxysm did not recur. Other cases are reported, of intermittent, treated in the same way, with a prompt arrest of the disease in every instance.

IRON IN ERYSIPELAS.—VELPEAU uses the proto sulphate of iron in solution, about twelve grains to the ounce of water, or eight parts to thirty of lard. The solution is applied by soft compresses, or cloths, kept constantly moist. Great reliance is placed in iron as an external application in erysipelas by him.

DYSENTERY.—Prof. WITT's remedy for this painful and often fatal disease, is *Leptandrin* and *Castile Soap*, equal parts, thoroughly mixed, in one-grain pill every hour until catharsis. Except in typhoid states of the bowels, he relies wholly upon these two remedies.

T H E

American Medical Journal.

VOL. I. CINCINNATI, O., FEBRUARY, 1857. No. 6.

For the American Medical Journal.

VERATRIN IN PLEURO-PNEUMONITIS.

MR. EDITOR:—

Having to write you in reference to your *Journal*, I have, also, concluded to throw together, in brief, an article on *Pleuro-pneumonitis*. I shall not enter into its *history*, nor speak of its *symptoms*, nor yet of its *treatment*, further than to give a just view of the case under consideration. For, I am not now writing for the ripe medical scholar, nor the practical physician, but the many neophytes in the profession. To such, plain *practical* instructions, the *experience* of older physicians, are infinitely superior to mere fine-spun theory, though the latter should come from the ripest scholar and most profound theorist.

My principal design in this communication is to give the peculiar *curative* powers of *veratrin*, in such a case. In doing so, I shall be compelled to give the case, with its symptoms and peculiarities as well as its antecedent treatment.

History.—She was attacked some seventeen days since ; fifteen of which I have been in attendance. Mrs. J.—this lady is aet. 51 years, and is of a predominantly *nervous* temperament. She has, also, for a number of years, been subject to *chronic hepatitis*, and also, *dyspepsia*. And for a long time her bowels have been extremely torpid, and will not readily respond to cathartics.

Symptoms.—These in brief were : for the short period before I was called, the ordinary *initials* ushering in fever ; as lassitude,

aching, alternate flashes of heat and cold. At the time of being called, she had a *chill*, followed by fever until the second morning, when the chill again appeared, but never returned again. Now, set in a low, continued fever, the pulse ranging from 112 to 140, small and corded; severe pain in the *pleura* over the right lung, the lung also being implicated; soreness and enlargement of the liver; the tongue, at first, dry and brownish; the skin dead-like, i. e., shriveled, harsh, dry but not hot; not much cough and *less expectoration*, and bowels very costive.

Treatment.—She would not, by any means, be persuaded to take an *emetic*, or I should have given her a thorough one of *lobelia*. Now, here I had to humor her whim and caprice, though at the imminent risk of her life; for, in just such cases as hers, *lobelia*, in broken doses, long continued, acts like a charm. But what must I do? Give her up? Never! Besides, I am *the only physician* in this place from whom she is willing to take medicines. She has confidence in me and the practice, but refuses to take *emetics*, or even *nauseants*, to any extent.

Pedeluvia.—As she was averse to these, I ordered a *jug of hot water*, wrapped in flannel, and kept to her feet continually.

Hepatics—Cathartics.—Knowing her liver to be diseased and torpid, I ordered the ordinary doses of podophyllin and leptandrin to be given every three hours, till operate. This treatment, aided by enemas, was continued some three or four days, and still no operation. I then ordered them in unusually large doses, and still no operation. Also, ordered the use of the syringe *often*, and with powerfully cathartic medicines, and still no operation, other than some *scybala*. She would not take castor oil, or I should have resorted to it after the use of my hepatics. Here, now, was another dilemma. Ordinary cathartics, aided by the syringe, would not operate. The whole alimentary tract was in a state of irritation. Action must be had or she must die. Now, I ordered the following:

R. Podophyllin,
Gambogia,
Scammony, aa,

made into pills, incorporating into each pill two drops ol. crotonis. I ordered two of these every three hours, till operate. *Four doses* were taken, aided by enemas, before an action was

had, and even then it was not free. Now, in obtaining one *desirable* condition, I had developed an *un-desirable* one—inflammation of the stomach. This I looked for, and prepared to meet it as best I could. *This*, with a *chance* for her life, was better than *certain death* from *torpor* of the whole alimentary tube. To break down this inflammation, I ordered:

- 1.—*Sinipism over the stomach* ;
- 2.—The continuation of the *hot application to the feet* ;
- 3.—The *alkaline sponge bath* ; and
- 4.—The following :

℞. Lobelia, gr., ss,
 Gelsemin, gr., j,
 Carbo Ligni pulv. grs., ji,
 Morphine, gr. $\frac{1}{8}$,

This powder was to be given every hour and a half. Had I had *asclepin* I should have added one grain of this to each dose.

I continued the above treatment about four days, with some amendment for about forty-eight hours, and then she gradually grew worse.

Diuretics.—In the interim the *urine* became scant, and I ordered a strong *decoction* of *polytrichium juniperum* in three or four tablespoonful doses, to each dose of which, one teaspoonful of *sp. æth. nitrici* was added. This was given every three or four hours for a few times, when the urine became free. Afterwards, I had it occasionally given to keep up the normality of the kidneys.

Now, having done all this, about the *ninth* day of my attendance, and the *eleventh* of the disease, I found my patient must inevitably die, unless some bold and decisive stroke be given. I, therefore, resolved upon the use of *veratrin*, notwithstanding I had had but little experience with it. I used it thus:—

℞. Veratrin, gr., $\frac{1}{8}$,
 Gelsemin, gr., j,
 Morphine, gr., $\frac{1}{8}$,

Gave 1 powder in a little syrup every 2 hours, till it *reduced the pulse* and procured *rest*. These were obtained by the *fourth* dose. I now *diminished* the *veratrin* somewhat, still continuing the other agents as before, and gave every 3 hours. In 36 hours under this treatment I considered my patient *safe*. In four hours,

after the use of the veratrin, she was comparatively easy, her pulse *softer, slower* and *fuller*, skin *cool* and, though not moist, healthy to the feel, breathing easy, and expectoration pure. In a word, at this writing, she is convalescing, and, under the same treatment continued, though less vigorously, I have no doubt but that she will be able to sit up in a short time.

If, after the entire abatement of fever, I think she needs *tonics*, I will order the following:—

℞. Hydrastin, grs., ʒi,
Qunia, gr., ss,
Leptandrin, gr., ss,

One of these 3 or 4 times per diem.

Now, I am sure that, under the ordinary treatment presented in such cases, the patient could not have recovered. In a word, nothing short of *veratrin*, known to me, could have saved her. I do not intend to *deify veratrin*; still, I think, in *pneumonias*, and indeed in all *inflammations*, where there is nothing forbidding it, it should be used more frequent. True, it should be used with great caution and discrimination. It is a powerful medicine. This the *tyro* should *know*. But he should not be forbidden its use, when other milder and more controllable means fail.

Now, in this case, I commenced *when the books condemn its use*. The *stomach* was *irritable*, and there were *nausea* and *vomiting*. But, I plainly saw that my patient must *die without it*; and she could *but die with it*. Hence the venture, and, in the venture, a life is saved. But, in combining *morphine* with it, *nausea* and *vomiting* were almost entirely arrested, instead of increased, as feared.

In conclusion, let me remark to the *tyro* that I am speaking of *veratrin*, the *resinoid* of *veratrim veride*—not *veratrine*, the *alkaloid* of the same. With this I have no experience, although it has been in use in Old Physic for a number of years. By some it bears a reputable name, by others, disreputable. That has not been long in use by any class of physicians; but, among those best qualified to judge, it bears a reputable character. I have sent for *the tincture*, and I expect to make more use of it. And if it prove *valuable* and *reliable*, in cases where it is indicated,

and withal safe, in legitimate medicinal doses, you may perhaps, hear from me again in reference to its therapeutic powers.

Respectfully,

ALFRED MALONE, M. D.

Pal., Ills., Dec. 15th, 1856.

REDUCING DISLOCATION OF THE THUMB.

BY JOHN DOE, M. D., OF CABOT, VT.

IN this dislocation, the phalangeal end of the metacarpus projects into the palmar surface of the hand, forcing itself between and through the flexor muscles of the thumb, which form a loop around the head of the bone. Extension made upon the thumb makes this loop more tense; and as the metacarpal end of the first phalanx is broad and considerably flattened on its palmar aspect, it must be apparent at once that the difficulty of reduction is directly as the amount of extension. There is good reason to believe that extension would never succeed in these cases without rotation. The principal indication in treatment here, is, to relax the flexor in forming the loop, and by carrying the muscles forward with it, disengage the head of the metacarpus. This can be done in the following manner:

Having previously warmed the hand, if cold, in warm water, the surgeon should seat himself by the patient, facing in the same direction, and upon the same side with the injured thumb, and place the hand upon his knee. Tip back the thumb upon the dorsum of the metacarpus to more than a right angle, or so as to form a slightly acute angle with the latter bone; place both index fingers against the ball of the thumb, and the ends of both thumbs against the dorsum of the disarticulated end of the phalanx; now by pushing forward forcibly, get steadily against the phalangeal bone with both thumbs. Reduction will generally be effected on the first trial, and almost instantly.

The writer claims not the honor of originating this method, but supposes it to be adopted by many surgeons in this country.
—*N. O. Med. News, Dec., 1856.*

MINUTE INJECTIONS OF MAN AND ANIMALS.

BY HENRY GOADBY, M. D., F. L. S., ETC.

ALTHOUGH highly desirable, as the demonstrator of the capillaries of normal tissues, I do not think this kind of injection fitted for morbid preparations, the infiltrated gelatine producing appearances of a puzzling kind, and calculated to mislead the pathologist.

In preparing portions of dried, well-injected skin for examination by the microscope, I have tried the effect of a dilute nitric acid, as a corroder, with very good results. But probably, liquor potassæ would have answered this purpose better.

When size injection is to be employed, colored either with vermilion or the chromate of lead, the animal should be previously prepared by bleeding, to empty the vessels; for if they be filled with coagulated blood, it is quite impossible to transmit even size, to say nothing of the coloring matter. Hence the difficulty of procuring good injections of the human subject.

But with the 'chemico-gelatinous' injection, no such preparation is necessary; and success should always be certain, for the potash liquifies the blood, while constant and long-continued pressure by the syringe drives it through the parieties of the vessels into the cellular tissue. The large quantity of infiltrated blood—the invariable concomitant of this process—characterizes this from all other modes of injecting, and is a distinctive feature of these preparations.

I find that a superior preparation of gelatine is now on sale at the grocers' shops, nearly equal in appearance to isinglass.

The only preparations of gelatine extant when we made the experiment recorded in our paper, contained a large quantity of dirty insoluble gluten, from which defect, we venture to assume, the French gelatine is now free.

About the year 1849, Dr. P. B. GODDARD, of Philadelphia, proposed a new injecting material.

He took a small portion of vermilion and rubbed it down in a mortar with linseed oil; to this he added an excess of sulphuric ether. The intention is to employ the ether as a vehicle for conveying coloring matter into the capillary system, which is

left behind by the subsequent evaporation of the ether. By this process we have seen some very minute, and beautiful injections, the capillaries being round and full, and retaining their normal size, very nearly, whereas in size injections they are always preternaturally enlarged.

We so soon succumb to the anæsthetic properties of sulphuric ether, that every attempt to use this form of injection in our hands has failed, simply because we have been compelled to discontinue its use to escape etherization; but it is doubtless a good injection with those persons not so prone to its influence as ourself.

We prefer another form, which is equally good, viz.: after intimately mixing the coloring material, red and yellow, with linseed oil, substitute an excess of turpentine for the sulphuric ether. The results of the latter in our hands have been fully equal to anything we have seen by the ether process.

It has frequently happened that similar inventions originate at the same time, in different parts of the world, by men who have never had the slightest communication with each other; and it may happen we are giving expression to a plan which, while we believe it originated with ourself, may have been used by other operators. Since our residence in this country, (seven years,) we have occasionally seen European injections, and a close examination of some of them has convinced us that size was not the material that had been employed in their procurement; in fact, they more nearly represented the appearance and effects we have produced with the turpentine—or paint—injection, than anything we can compare them to. If they were not size, as little were they chemico-gelatinous; neither were they ether injections—we still think they were a much diluted (by turpentine) paint. These remarks apply more particularly to injections of great beauty, by Professor HIRTL, of Berlin; and another and equally significant fact was also apparent—that the injection had not been made in gross—in the body—but in detail, thereby rendering necessary appliances also of our invention—hereafter to be described—of which we have never seen any description.

It is proper to remark that in making either of the two latter injections, quantity of coloring matter is immaterial; it is only necessary to make it sufficiently fluid with oil, in the first instance,

and to have a large excess of ether, or turpentine, ultimately. In use, it should be well mixed up, and a charge drawn from the upper surface, while the particles of coloring matter are subsiding.

It will readily be conceived that if equally good, these latter described forms of injection are most desirable, inasmuch as they are soon prepared, and are made and used cold, which is of great advantage.

In our experience there is one royal road to success with injected preparations—*first empty the vessels*—it is easy to refill them. In making preparations of the lower animals, dogs, cats, frogs, etc., etc., we invariably *bled them to death*—after which, allowing them to rest till the rigor mortis had passed off, we never failed to make good preparations.

This must have been, of necessity, the *secret* which RUYSCH could not divulge—he is said to have *shuddered* when importuned on this subject. Having charge of a large public hospital, it is easy to understand that when he had an already attenuated and good subject for injection, whose case was hopeless, or nearly so, that he *did not scruple to use the lancet freely*, and thus prepared it *secundem artem*, for his injecting syringe and museum! For many years we have not doubted that this constituted his sole secret—one that he could not divulge, without accusing himself as a murderer. Suffice it that no man ever made such splendid injections of the human subject as those he left behind him.

We have frequently been asked what vessels we inject by to procure certain preparations, and perhaps a few general instructions on this subject may not be inappropriate.

It may be well to premise that, as a rule, veins should be preferred to arteries for the purpose of insuring fine injections. He, who has seen the circulation of the blood in the web of the frog's foot by the microscope, can have no doubt on this subject, as he will have seen that an artery terminates in *a* capillary, but that these vessels empty themselves into numerous veins, ergo, the shortest way to reach the capillaries is through the veins. Some preparations, however, offer an exception to this rule.

We write these papers for the student—not for the already accomplished manipulator.

If the intention be to inject the alimentary canal, from the œsophagus to the anus, insert a pipe in the portal vein as it enters the liver. The anatomist knows that this vein is found to the right of the *Lebulus spigelii*, its direction being to the left.

By this vein, the whole alimentary canal will be beautifully injected with any form of injection, if the subject be attenuated, or the vessels previously emptied; moreover, the entire process is carried on beneath the operator's vision, and he can see, therefore when to discontinue his labor, for fear of producing extravasation and spoiling good preparations.

The vascular structure of the liver is best displayed in a series of injections; the first should be an exposition of the distribution of the portal system. For this purpose the portal vein should be cut as near to the intestine as possible, and a pipe secured in it, through which the injection must be thrown till the external lobular surface be minutely injected. The liver injected through the portal vein may have yellow injection. Another liver may be injected by the hepatic veins, with light colored smalt blue. Still a third liver should have, in addition to the two latter systems of vessels, the hepatic arteries red. Such preparations are found in our collection, and are exceedingly instructive.

If it be desired to inject a kidney of any animal, the great object will necessarily be to show the *Corpora malpighiana*—*Malpighian tufts*—and to accomplish this, the renal artery must be employed.

So, if it be desired to show the *Corpora wolffiana* in the kidneys of frogs, toads, and fishes, the artery must be invariably used for the purpose.

To inject the tissues of the eye minutely, we have always best succeeded in removing them very carefully from the body, and inserting pipes in the opthalmic artery and vein; firstly injecting through the vein till blood colored by injection comes from the pipe inserted in the artery, and then throwing the injection through it.

By this process we have made some beautiful preparations of the choroid coat, retina, ciliary processes, *venæ*, *vorticossæ*, etc., of a number of animals.

Injections of the lungs are easily made; in the frog, a bifid

pulmonary vein will be seen passing over the bulbous arteriosus; insert a small pipe beneath the bifurcation, that is to say, as close to the heart as possible so as to embrace both branches of the vessel; thus both lungs will be injected. In man, and the higher animals, it is necessary to insert pipes in the pulmonary arteries and veins, injecting by the veins until the injection appears through the pipes inserted in the arteries, when they in their turn should be used till the surface show indications of fullness.

If the lung be human, a large pipe should be secured in the trachea, or large bronchial tube, through which tallow, made fluid by heat, should be injected to the air cells, which can not well be seen in a state of collapse; in this condition the organ will soon dry, when it can be sliced up for microscopical examination, the slices being firstly placed in oil of turpentine to dissolve the tallow—the good preparations may then be mounted in Canada balsam.

The lungs of other animals may be inflated, and left to dry, but we have not succeeded in inflating human lung; the air appears to transude through the parieties of the parenchyma.

The circulation of reptiles is peculiar; they possess a ventral vein, which occupies the mesial line of the abdomen—it assists the portal vein to return the blood from the intestinal tract.

If the operator can succeed in securing a pipe in this vein—no matter whether he inject up or down, he must succeed in obtaining *every tissue of the body*—even to the webs of the feet in frogs—*beautifully* injected!

We have injected numberless frogs by this vein, and always with success; so too, tortoises, and ophidian reptiles (snakes.) Many frogs, however, have we injected from the portal vein, employing our dissecting microscope to enable us to insert the pipe; whenever we intend to proceed thus, we firstly bled the animal to death—process which will occupy the operator *four hours!* The best plan is to open the chest, and snip off the apex of the heart; this will be followed by an instantaneous gush of blood, immediately after which a plug will be formed and the circulation go on as well as ever; this, therefore, must be removed, and the process be repeated simultaneously with the formation of other plugs. The operation is undoubtedly tedious and tiresome, yet the ultimate results—the vessels being entirely emptied—will

fully repay the manipulator. In our experience, far less time is consumed in carefully preparing and well injecting *one* frog, than a series of abortive attempts with several.

There is, however, always more certainty of obtaining a beautiful preparation of every tissue of the body from fetal, rather than adult subjects. Fetal lambs and calves form excellent subjects; in these, a pipe should always be secured in a vein, and the like care and caution displayed as already advised in regard to a human fetus. The bodies of such are tender, and should be carefully handled lest the skin be broken, and a gap formed for the escape of the injection; whenever this occurs there is an end to the process.—*Med. Independent.*

USES OF GLYCERINE.—This article is likely to take its place among the most highly valued, both in medicine and the arts, and the sooner, since a process has been discovered by which it can be rendered pure by distillation. Its remarkable power as a solvent, united to its entire blandness, and freedom from all irritating and fermenting properties, recommend it for a vast variety of uses. It dissolves the vegetable acids, the delinquent salts, the sulphates of potassa, soda and copper, the nitrates of potassa and silver, the alkaline salts of morphine, strychnine, brucine, veratrine, the sulphurets of potassium, lime and iodine, the iodides of sulphur, potassium and mercury, the salts of quinia, etc. Besides its extensive usefulness in diseases of the skin and ear, it is used internally as a substitute for cod-liver oil; and also in its purity, for dissolving calculi, by being injected into the bladder. It is also a substitute for syrups in preserving fruits and vegetables, and for certain medicinal preparations. Fresh meats are kept in it for any length of time; and both animals and vegetables are preserved in it without changing their color, however brilliant. Vast quantities can be manufactured from every variety of oils, and at very low prices, compared to what it is sold at now; and it seems to promise well for combustion, both for heat and light, in certain combinations.—*Memphis Medical Recorder.*

CARBONIC ACID AS A LOCAL ANÆSTHETIC IN UTERINE DISEASES, ETC.

PROF. SIMPSON made some remarks on this, at a recent meeting of the Obstetrical Society of Edinburgh. He said that he had used carbonic acid successfully, as a local anæsthetic, in neuralgia of the vagina and uterus, and in various morbid states and displacements of the pelvic organs, accompanied with pain and spasms. He had found it also sometimes of use in irritable states of the neighboring organs. Two years ago, he had under his care, from Canada, the wife of a medical gentleman, who was suffering much from that most distressing disease—dysuria and irritability of the bladder. Many modes of treatment had been tried in vain. The injection of carbonic acid gas into the vaginal canal several times a day, at once procured relief, and ultimately effected a perfect cure. She has remained well since her return to America, and lately became a mother. Occasionally, relief follows immediately. In two or three instances, he stated he had one case where the patient was almost invalided, and almost entirely kept to the supine posture, for years, from feelings of pain and bearing down in the uterus and neighboring parts, particularly on attempting to sit or walk. Many modes of treatment were tried by himself and others, with little or no benefit. She has, however, at last regained in a great measure, the power of progression, and freedom from suffering in the erect posture—a result which she herself ascribes to the local application of carbonic acid gas.

In practice, he generally used a common wine-bottle for the formation of the carbonic acid gas, and formed the gas by mixing in the bottle six drachms of crystallized tartaric acid, with a solution of eight drachms of bicarbonate of soda, in six or seven ounces of water. A long, flexible caoutchouc tube conducts the gas from the bottle into the vagina. The cork fixing this tube into the mouth of the bottle should be adapted so as to prevent any escape of the gas by its sides. With this view, the cork should be perforated by a metallic tube, and covered externally with a layer of caoutchous. In a case in which the two preceding children were both lost, he had successfully brought on

premature labor at the eighth month, by the repeated application of carbonic acid gas to the vaginal canal with this apparatus ; the carbonic acid not acting directly as a specific oxytoxic or excitor of uterine contraction, but indirectly only, by distending greatly and mechanically—as examination with the finger proved it to do—the vaginal canal, and ultimately separating, like the injection of water, the membranes from the cervix uteri.

The application of carbonic acid as a local anæsthetic to the uterine mucus surfaces, and to other parts of the body, is not a discovery of late times. He had found that in this, as in many other examples, that what appeared at first novel, was, when fully investigated, a practice known previously in its essence, and perhaps in its more minute details also. Besides, here as elsewhere, when once a principle is detected, such as the anæsthetic power of carbonic acid gas when applied topically, we can explain by it the good effects of modes of practice which previously, perhaps, we are inclined to ridicule and reject. The fact that carbonic acid, when locally applied to a mucus surface, acts as a sedative or anæsthetic, explains a practice common among the ancients, viz., HIPPOCRATES, PAULUS, ÆGINETA, RUEFF, PARE, etc., all of whom used to burn herbs, aromatic and medicinal, and convey the fumes, by means of tubes and appropriate apparatus, to the interior of the vagina ; and, such vapor being loaded with carbonic acid, it is more than probable that if such treatment were effectual, it was through the anæsthetic properties of the gas here alluded to. Again, there is a modern practice much in vogue on the Continent, of injecting the vagina, etc., with the German waters of Nuheim, Marienbad, etc. ; the utility of the practice, which Dr. S. has been assured by his friend, Dr. FUNCK, of Frankfort, is most marked in some diseased states, will find its true explanation in the local anæsthetic effect of carbonic acid, as these waters contain a large quantity of the gas. A knowledge of the topical effects of carbonic acid serves, perhaps, also, to afford an explanation of other points in common therapeutics ; as, for example, its action in subduing gastric and intestinal irritation. Hence the use of effervescing draughts, aerated waters, etc., in gastric irritability and nausea ; perhaps the antacid action of the alkali may have some effect, but most likely it is the anæsthetic properties of the carbonic

acid gas. The sedative and curative effects of injections into the rectum of carbonic acid gas in dysentery, have a similar explanation, and serve to corroborate this view of its action. As an example of its use as a local anæsthetic to a cutaneous surface, Dr. S. alluded to the *cataplasma cerevisiæ*, or yeast poultice, which exhales from its surface a quantity of the gas. It was commonly applied to irritable and sloughing sores, and its soothing, healing, and antiseptic properties, were doubtless owing to the carbonic acid gas. As an anæsthetic application to cancerous ulcers, the effects of carbonic acid gas are excellent. Dr. EWART, of Bath, says, 'he has kept a person in ease and comfort, who, for so great a length of time before, had known only agony and torture.' 'What,' he elsewhere observes, 'strikes us in the two preceding cases with the greatest astonishment, is, the *almost instantaneous relief of pain which never failed to follow the application of the gas.*' In reference to the effects of carbonic acids upon raw surfaces and wounds, Dr. INGENHOUSZ mentioned to BEDDOES the following experiment: 'Blister your finger, so as to lay bare the naked and sensible skin. The contact of air will produce pain; put your finger into vital air—oxygen—and this will produce more pain; introduce into fixed or azotic air—carbonic acid or nitrogen—and the pain will diminish or cease.' In relation to this statement, Dr. BEDDOES informs us that he made the following experiments on three different persons: *First.* The raised epidermis of a blistered finger, after all action from the cantharides had ceased, was cut away in carbonic acid gas. No pain was felt. *Secondly.* A second blister being opened in common air, smarting pain came on. In a bladder of fixed air, this pain soon went off. *Thirdly.* After opening a third blister, the finger was instantly plunged into oxygen. It felt as when salt is sprinkled on a cut. In carbonic acid gas, the pain, in two minutes, quite subsided; but returned when the denuded skin was again exposed to the atmosphere. If there be no source of fallacy in these experiments, they certainly point to one kind of improvement in the treatment of some painful burns, wounds, etc.; for they appear to suggest the possibility of the suffering which is attendant on such injuries being controlled and canceled by keeping the pained parts in contact with carbonic acid, or with some other gas or fluid capable of acting

as a local anæsthetic. If the reports of EWART, BEDDOES, and FOUCROY are correct, we ought, also, indeed, to find carbonic acid, an excellent application, even as far as the mere healing and cicatrization of the broken surfaces are concerned.—*Edinburgh Med. Jour.*, July, 1856.

A CASE IN SURGERY.

AT 8 o'clock the 18th. of November, a Spaniard and raftsman was brought into my office, and upon examination I found him as follows, viz:—

Been out all night on a *spree*, and during the occasion, got *stabbed*, either with a knife, or dirk, in the illiac region into the bladder. All efforts to *urinate* proved abortive, in consequence of which, his bladder had become so greatly distended that *urine* was flowing through the incision quite freely—Penis was black and œdomatous.

Considering the stimulated condition of his system, wound of the *bladder*; and want of good nursing, I deemed the case doubtful and gave in accordance a guarded prognosis.

Treatment—Failing to introduce a silver, I sent for a gum catheter, which, after varied manipulations, was introduced and some two quarts of bloody urine drawn off.

This relieved him of much pain, after which he was taken to his room where I endeavored and coaptate the incised parts and retain them in situ by strips of isinglass plaster; but *pressure* sufficient to make the plaster adhere, caused a copious flow of *urine* out of the wound; I then placed a square piece over it to prevent the admission of *air*; enveloped his *penis* and adjacent parts in clothes wrung out of cold water; kept him in a recumbent position; gave a sparse diet; little fluid as possible, and drew off the urine again at 12 M., at 4 P. M., and 10 P. M.

November, 19th.—Wound and Penis much swollen; bowels costive; some shooting *pain*; introduced catheter three times and ordered the cold water continued.

Nov. 20th. Swelling declined; penis nearly normal and this morning he was able to urinate! Pains slight.

Nov. 21st. prescribed a sufficient pulvis of aa of lept. and pod., to produce a slight evacuation; little pain; is quite smart.

Nov. 22nd. Pus is forming; removed plaster and substituted a poultice; cold clothes discontinued.

Nov. 23d., 24th. and 25th. Poultice continued; normal pus exudes freely; diet more generous; patient is walking about; promises if I'll cure him he'll not drink any more till Christmas!

Nov. 26th. Not admiring the edges, I applied the caustic freely, and again the poultice.

Nov. 27th. Left off poultice and applied a healing salve; doing finely.

Nov. 28th., 29th. and 30th. Plaster continued; is walking the streets; came to my office to have it dressed.

Dec. 4th. Called at my office; it was nearly normal; removed the salve and discharged him sound and sober! He expressed himself very *grateful*; said if he had \$100 I should have half of it; but unfortunately for me, he hadn't it; so I did as other doctors do—*charged it*. J. R. C.

Winona, M. T., Dec. 10, 1856.

PERCHLORIDE OF IRON AS A HEMOSTATIC.

A CORRESPONDENT of the *Moniteur des Hopitaux*—1856, No. 24—states, that one of the principal elements of success in the difficult and dangerous operations M. MAISSONNEUVE is famous for undertaking, is the remarkable use he makes of hemostatics during their performance. He cites a recent case, occurring in a lad of sixteen, of fungus tumor of the dura mater, the growth of which, after having been temporarily arrested by ligature of the caratoid, took an enormous proportion, and was accompanied by exhausting hemorrhage. M. MAISSONNEUVE determined upon its removal, but the tumor bled on the slightest contact, and the patient would not be able to bear the slightest loss of blood. The line of incision extended from the anterior parts of the ear to the summit of the head, and descending along the nose, was carried backwards, and then upwards to the base of the jaw,

and its point of departure. A great number of arteries were thus divided, five or six of which, by reason of their anastomotic enlargements, had acquired almost the size of the radial artery. Intelligent assistants immediately compressed them with the finger, but it was impossible to thus continue the dissection without exposing the patient to the danger of death from syncope. M. MAISSONNEUVE therefore applied to each vessel a little pledget of charpie, soaked in perchloride of iron, which was allowed to attach itself to the wound. At every stroke of the bistoury or scissors he applied a new plug, so that during the operation, the patient scarcely lost a spoonful of blood; and when the tumor had been entirely removed, the entire surface of the wound was found completely dried and tanned, and was at once dressed, without the necessity of the application of a single ligature. The brown eschar which covered the wound was detached about the twentieth day, without giving rise to any hemorrhage; and although the cure can scarcely be expected to prove radical, the patient for the present is perfectly well.—*Monthly Stethoscope*, Nov., 1856.

CHEMISTRY OF FOOD.

(CONTINUED.)

OXYGEN.—Considered in relation to its abundance, as well as to the energy of its chemical affinities, oxygen occupies the first rank among the elementary forms of matter. The atmosphere of the earth contains twenty-three per cent. of oxygen. Water, whether in the form of vapor suspended in the air, or the immense liquid masses of the ocean, covering three fourths of the entire surface of the globe, is everywhere found to contain eight-ninths of its weight of this gas. Silica, carbonate of lime, and alumina, by far the most abundant constituents of the solid crust of the earth, contain about one half their weight of it, and the most careful estimates justify the conclusion that three-fourths of the earth with its surrounding atmosphere, is composed of this agent, either free, or in its various states of combination.

Its range of affinity is so extensive, that it plays some part in

almost every change that occurs in natural bodies, animate or inanimate. Without it, the flame of a lamp or candle would at once become extinct; the galvanic current, which now courses in every direction upon insulated wires, the nervous network of every civilized land, outstripping time in the rapidity with which it communicates to distant places a knowledge of passing events, and which is essential to a great variety of the processes pertaining to many of the most useful and profitable departments of industrial labor, would lose its magic power; and life, all life, whether animal or vegetable, would cease at once and forever.

But in the production of flame, in the generation of the galvanic current, and in the vital processes of all organized beings, the final result of the oxidation so essential to the phenomena peculiar to each, is destructive. Oxygen feeds the flame, but consumes the oil; it sets in motion the galvanic current, but destroys the zinc of the battery; it furnishes the respiratory apparatus with what is—to it—quite essential, but burns up the carbon and hydrogen of the tissues, and causes them to be expelled from the system in the form of carbonic acid and water.

The quantity of oxygen consumed by an adult man, according to the experiments of LAVOISIER and SEGUIN, in the process of respiration alone, is about 746 lbs. per annum, or $32\frac{1}{2}$ oz. per day. MENZIES estimates the annual consumption at 837 lbs, or about 37 oz. per day. The number of cubic inches required for daily consumption, according to the former estimate, is 46,037. This is sufficient for the oxidation of the whole mass of the blood, estimated at 24 lbs. and containing only 20 per cent. of solid matter, in four days and five hours. Hence, the food consumed in that length of time should be sufficient to furnish 24 lbs of blood with the carbon and hydrogen essential to its constitution. But the importance of oxygen to the respiratory process, has already been noticed in its relation to carbon and hydrogen, and it remains now to be considered as a constituent of food and drink.

Estimates based upon the observations of BOSSINGAULT show that the dried hay and oats constituting the food of a horse for 24 hours, and amounting to $32\frac{1}{2}$ lbs, contained $12\frac{1}{3}$ lbs.=38 per cent. of oxygen. About 66 lbs. of water, containing $58\frac{2}{3}$ lbs.=88.9 per cent. of oxygen was consumed in the same time; showing in the aggregate a consumption of about $98\frac{1}{2}$ lbs. of food and

water, of which 71 lbs.=about 72 per cent., was composed of the agent under consideration.

Similar observations made upon the potatoes, grass and water, consumed by a cow in 24 hours, show results almost precisely corresponding with the above. It seems reasonable, then, to conclude that, independently of the amount of oxygen required for respiratory purposes, herbivora require not less than 70 or 75 per cent. of their food and drink to be composed of this agent. The proportion of oxygen in some of the most common articles of diet, with the average quantity per man consumed each day, for thirty days, during the month of Nov. 1840, according to the observations of LIEBIG, made upon a company of soldiers of the Body Guard of the Grand Duke of Hesse Darmstadt, referred to in a previous number of this series, will appear from the following table:

Kind of Food.	No. of Ounces.	Per cent. of Oxygen.	No. oz of Oxygen.
Beef.....	4.02	70 to 72	2.91
Pork.....	1.2	70	.84
Potatoes.....	18.5	79.35	14.68
Peas, beans & lentils	.52	35.	.18
Sourkrout.....	.2	90.	.18
Green Vegetables..	3.22	85.	2.74
Bread in Soup.....	.67	70.	.47
Leeks and Onions.	.38	90.	
Fat, Lard, etc.....	.65	9.7	
Butter.....		16.8	
	<hr/> 26.36		<hr/> 22.40

If this estimate is correct, the oxygen consumed amounted in the aggregate to 22.4 oz. or 85 per cent. of the whole amount of food. A few of the smaller items in the table are not found in the analysis at hand, but if incorrect they can not materially affect the result. Now, if it be allowed that each man consumed in the form of tea, water and other drinks, only 21 oz. of fluid, the oxygen of the food and drink must have been about 41 oz. per day, or 25 per cent. more than is required for the respiratory process for an equal time. But admitting that this estimate may be somewhat too great, it may safely be assumed that as much

oxygen is consumed in the form of food and drink, as in the oxidation of the blood. The aggregate can not be less, for an adult, taking an ordinary amount of exercise, than fifteen hundred pounds per annum.

The quantity of oxygen contained in some of the most important animal and vegetable substances, will appear from the following statement :

Blood.....	75.36	per cent.
“ (dry).....	21.3	“ “
Fibrine and albumen of blood.....	21 to 23	“ “
Fibrine of vegetables.....	22 “ 24	“ “
Albumen “	24	“ “
Caseine “	21 “ 22	“ “
“ of animals.....	22	“ “
Starch	49	“ “
Grape Sugar.....	56	“ “
Cane “	51	“ “
Gum.....	51	“ “
Proteine.....	22	“ “
Lactic Acid.....	49	“ “
Albumen and Fibrine (MULDER'S Analysis of Blood,).....	21 “ 23	“ “
Gelatinous Tissues (SCHERER'S An- alysis).....	23 “ 25	“ “
Cartilaginous Tissues.....	27 “ 29	“ “
Horny “	24 “ 26	“ “
Beef, dried.....	22	“ “
“ roast.....	23 “ 24	“ “

In most of the above noticed analyses, the fractions have been omitted, and it is to be understood that in nearly all, the substance has been carefully dried previous to the process, so that the solid matter only is subjected to it. In all cases, the water separated in drying, contains 8-9ths of its weight of oxygen, and the percentage in the moist substance may be conveniently estimated when desirable.

G.

APPLICATION OF ELECTRO-CHEMISTRY TO THERAPEUTICS.

WE copy the following from 'Braithwaite's Retrospect of Practical Medicine and Surgery,' part the Thirty-First, page 227, a strictly scientific work :

Chemistry is about to save from death, or a premature old age, those artizans whom the exercise of a cruel profession condemns to breathe metallic dust and vapors, who poison themselves daily for the sake of living, and acquire so many dreadful infirmities in the silvering of looking-glasses, the preparation of white lead, or working in the mines. Science comes to the help of the victims of industry or pleasure, and extracts from their bodies atom by atom, the devastating metal that had fastened on their tissues, and weighed on the springs of life. These hopes are drawn from a memoir presented to the Academy of Sciences, by M. DUMAS; and the authors of which—M. M. A. POEY, of the Havana, and MAURICE VERGNES—will hold a distinguished rank among the benefactors of mankind, if experience confirms their assertions.

The invention consists in the application of Electro-Chemistry to the cure of the diseases we have mentioned; and, surely, of all its marvelous uses, this would be the most admirable.

M. POEY takes an unfortunate patient, corroded by lead, mercury, gold, silver, or any other metal, and places him in a metallic tub, isolated from the ground. The man sits down, his legs horizontally stretched out on a wooden bench, isolated from the tub, which is filled with water up to his neck. The water is slightly acidulated, to increase its conductivity, and the acid varies according to the cases. Nitric or hydrochloric acid is used for the extraction of mercury, silver, or gold; other acids for that of lead. This done, the negative pole of a pile is brought into contact with the sides of the bathing-tub, and the positive pole placed in the hands of the patient.

The work of purification is now in full activity; the electrical current precipitates itself through the body of the sufferer, penetrates into the depths of his bones, pursues in all the tissues every particle of metal, seizes it, restores its primitive form, and, chas-

ing it out of the organism, deposits it on the sides of the tub, where it becomes apparent to the naked eye.

In this great discovery, chance or accident has played a part. One of the inventors—M. MAURICE VERGNES—occupied himself with galvanic gilding and silvering. His hands, being in continual contact with solutions of nitrate and cyanuret of gold and silver, got covered with ulcers in consequence of the introduction of metallic particles. One day, he plunged the diseased organs into the electro-chemical bath, at the positive pole of the pile; and after a quarter of an hour, to the great surprise of the beholders, a small plate of metal brought into contact with the negative pole, covered itself with a coating of gold and silver, extracted from the hands of the operator, whence the most powerful remedies had not been able to eliminate them. This discovery was made on the 16th of April, 1852.

The metallic atoms extracted from the body, deposit themselves on the whole surface of the tub; but they are more abundant opposite to the part of the body where the metal was lodged. The size of the metallic spots vary considerably; some are microscopical, others have the dimensions of a pea; those of the size of a pin's head are very common. 'I have seen,' says M. POEY, 'after the first bath of a person who complained of pains in the arms, from having taken mercury, the contours of the arm perfectly drawn on the metallic plate, by the deposit of metallic atoms, that without doubt, proceeded from the suffering member.'

We shall terminate our article with an experiment made before the members of the Faculty of Medicine of the Havana.

A patient had undergone during a whole week an external mercurial treatment, (frictions with mercurial ointment.) He had then taken several lukewarm baths, and it could not be supposed that any mercury still remained attached to the skin.

He was put into a water bath mixed with acid. After having remained in it for five minutes, some of the water was taken out, and afterwards analyzed by M. PERACECA, who found no traces of mercury in it. The circuit was then closed, and after the electric current had acted for about an hour, a new sample of the water was taken. Mixed with an alkaline sulphuret, the water became black, and a piece of copper having been dipped into it, gave sure signs of the existence of a small quantity of mercury. Thus, the water of the bath now held mercury in solution

During the experiment, a perfectly clean piece of copper had been placed at the negative pole. When it was taken out of the water, toward the end of the operation, its yellow, greenish color not only testified an oxidation in which mercury had taken a part, but small white spots were scattered over the surface, one of which, of the size of a square line, was very brilliant, and of a mercurial whiteness. The plate having been heated underneath, the spots disappeared, and the original color of the copper was restored, which proves the spot was mercurial.—*La Presse*.—*Medical Times and Gazette*, March 3rd, 1855, p. 216.

CLINICS IN THE COMMERCIAL HOSPITAL.

DURING the past month a very interesting case has been presented, in the surgical department. The patient, a male, seventy years of age, with a severe contusion on the left leg, fractured tibia and fibula, the deep-seated soft parts being involved to a very great extent. As might be expected from the advanced age of the patient, and the extent of the injury, an unfavorable prognosis was given by the surgeon, and the only remedy that promised the least shadow of success was proposed, viz., amputation. To this the patient objected for a time, and wisely too, as the sequel of the case has already proven. Though the line of demarkation was becoming more visible every day, indicating at one time a speedy separation of the dead from the living mass, yet, the constitutional symptoms were not, at any time very annoying, much less corresponding in severity with the extent of the local injury.

Each returning clinic day the subject of these remarks was anxiously looked for by nearly every student in attendance. As soon as the hour had arrived for the lecturer on surgery to appear, all eyes were turned towards the door of entrance into the amphitheater, from the wards below, hoping no doubt that our old but venerable friend might be the first clinic patient for the day. Some in the expectation of being present during an important operation, others with a desire to see what nature had done toward the reparation of an injury of such magnitude, in a person

so far advanced in life. This aged man has been gradually improving, day by day, till at last, by the aid of crutches, he walked into the amphitheater with a limb unmutilated, and in the enjoyment of good health—in fine spirits, and with a fair prospect of gaining the use of his leg to aid him in his movements during the decline of life. Though somewhat twisted, it will nevertheless be found much better than an artificial limb, however near that limb might approximate nature, made by a Palmer in his very best style.

The treatment was principally local in character, instituted with a view to chemically decompose the offensive gaseous emanations, during the decomposition of the soft parts. After making a free incision into the fleshy parts of the leg, solutions of chloride of zinc, and nitrate of lead were liberally applied.

Another case of equal interest, a young man of about thirty years of age, with a fracture of the os frontis, just above the nose. The injury was produced by a brick, the sharp edge striking the bone. In this, as in the former case, the constitution did not respond to the local injury, or manifest any unfavorable symptoms apart from those the wound presented. Depression of both plates being apparent, the trephine and elevator were indicated in an operation which, according to many authorities, is the only mode of rendering aid with a view of permanently benefiting the patient. The operation was proposed, but the patient felt so well at the time, that he did not consent to have the operation of trephining performed. Fearful that more unfavorable symptoms might set in during the progress of the injury, the surgeon ordered general depletion from the arm, to be repeated as often as required, and a cloth constantly applied to the wound, saturated with cold water.

In this manner, the patient was treated; the first and second week passed over, yet no indication that the membranes were to any great extent involved. Should this patient survive, as the other alluded to has done, it ought to teach us to let well enough alone.

A woman some fifty years of age, was brought before the class with a luxation of the right humerus into the axilla. It was an old one with adhesions.

The mode instituted to reduce the luxation deserves a few remarks.

While under the influence of anæsthetics, and in a recumbent position, a cloth was passed around her body below the axilla, one person taking hold of it by which counter extension was being made, and extension by another person having hold of the forearm. In this manner, and with but little force the adhesions were in part broken up, after which the surgeon, by a circular or rotary motion of the limb, succeeded in freeing the head of the bone from its new attachments, when, by manipulations adroitly made, the luxation was reduced. During the short space of time it took to adjust the limb, an assistant held firmly the scapula in its normal position. W.

RESOLUTIONS OF THE MEDICAL CLASS.

At a meeting of the students of the American Medical College, of Cincinnati, A. S. DOUGLASS was called to the Chair, and F. D. CASS was appointed Secretary. On motion, a committee consisting of G. M. BOWERS, C. H. HITCHCOCK, G. W. CLARK, M. WRIGHT, and D. STALL was appointed to draft resolutions, expressive of our thanks to the faculty of the A. M. College, for their kindness to us, as students, and for the able and scientific manner in which they have imparted instruction to us.

The committee, after consultation, reported the following preamble and resolutions, which were unanimously adopted.

In behalf of the students of the above Medical Institution, we beg leave to submit the following resolutions :

1st. *Resolved*, That the teachings of the Professors of the American Medical College, through the past session, have been perfectly free from any tendency to prejudice the mind for, or against, any school of Medicine, excepting so far as the inculcation of a true and safe medical philosophy is concerned.

2d. *Resolved*, That they have spoken only in kind terms of those belonging to the various Schools of Medicine, and of the difference of opinion existing among them, not for the purpose of denunciation, but to draw truth therefrom ; that they have given credit to the teachings of other schools, so far as they accord with the principles of science ; that they have seemed to consid-

er all schools as members of a common fraternity, and that a friendly interchange of thought would be eminently conducive to the advancement of truth.

3rd. *Resolved*, That their teachings have been plain, yet full of profound truth; that they have not tried to impress the importance of any remedy, without giving satisfactory proof of its benign power; that they have not imparted any mode of cure, as such, without giving a scientific explanation of the *Modus Operandi*.

4th. *Resolved*, That we appreciate with feelings of much respect, the high and noble aim of the faculty, in advancing doctrines, that have for their foundation, truth: and that they have been presented in such a light, that the student may go forth into the world—a thorough reformer, with a mind unbiased by any one sect or creed, but he is left free to investigate truth in all its bearings, and to hold fast that which is good.

5th. *Resolved*, That inasmuch as we love freedom, toleration, independence and progression, should we love and esteem the American Medical College, and exert our influence in behalf of its prosperity. Its spirit of free inquiry, liberality and investigation, affords a rich repast for the most talented, and truth-seeking minds of the age.

6th. *Resolved*, That we tender our most hearty thanks to our instructors for unfolding, in so lucid a manner, the deep mysteries in Medical Science, and for the unvaried zeal and kindly interest with which their instructions are ever accompanied.

7th. *Resolved*, That we solicit the editors of the *A. M. Journal*, to publish the above resolutions, in said journal.

A. S. DOUGLASS, *Chairman*.

F. D. CASS, *Secretary*.

Cincinnati, Feb. 3rd, 1857.

A CORRESPONDENT of the *London Medical Times and Gazette*, in reply to a question concerning the origin of the phrase 'Dog Latin,' says, that it may possibly be a corruption of the term 'Doctor's Latin,' or the Latin employed in medical prescriptions, since that is so frequently *cur-tailed*.—*N. A. Med. Rev.*

Editorial.

SPRING SESSION.

THE Spring Session of the American Medical College will commence on the Twenty-Third of February, instant. It will continue Fourteen weeks. Each member of the Faculty will be present during this Session. There will be no doubling, no lapping, nor dove-tailing. Each Professor will promptly fill his hour.

The entire Faculty reside in or near the city; each member is devoted to the School; each one makes the interest of the College subordinate to no other interest, and is determined to neglect nothing that can advance the progress of the student, and the character of the College.

Among the present Faculty there are the most gratifying *associative* practices and sentiments. Each Professor is emphatically a Teacher. All clap-trap, fustian, and stump-speaking are kept out of the rostrum. Every lecture is marked with devotion to Science and to Art. The Student's professional welfare is the great purpose of each member of the Faculty. No one occupies his time by peddling nostrums, nor secrets, nor books, nor pet theories, nor routinism, nor sectarianism; but each boldly and manfully presents the fact and the philosophy of his section of instruction.

The prospects are good for a very large class. We learn that many of our former graduates will be in attendance, more or less, of the session. A good portion of the present class will continue through the Spring; and a large number of fresh applicants to the Profession, will be with us, doubtless.

Those who love Medical Independence and Medical Toleration, are assured that these constitute the spirit of the American College. Each man is *free* within the vast area of fact and principle, as they appear in the domain of organic science. The great want of the profession is Freemen at her altars of science,

and in her fields of practice. Such the *American* labors with all her energies, resources, talents, learning and science to develop. In such a labor, our friends are solicited to cordially and efficiently co-operate.

ZYMOTIC POISONS.—These are the causes of specific diseases: syphilis, of scarlatina, of variola, of typhoid fever, of glanders, of hydrophobia, of typhus fever, of puerperal fever, of surgical fever, of erysipelas, of boil, of carbuncle, of the disease consequent upon a wound by the scalpel, of wounds by venomous reptiles, of cholera, of whooping cough, of gonorrhea, of yellow fever, of the miasmatic fevers, and of mumps. These poisons have striking differences from other poisons, the following may be mentioned, viz., they do not act in proportion to their quantity; the least amount of a zymotic poison acts just as certainly and fatally, as the largest amount; during their career they do not exhaust themselves, but augment themselves; the disease, during its progress, generates what—when introduced into another constitution—will beget the same disease again; there is in the poison a reproduction—a power to continue its species; the constitutional state caused by the poison, is one of depression, and the poison in each case has a specific tendency, a localization, as the parotid gland in mumps, Peyer's glands in typhoid fever, the skin in small pox. And as further peculiarities, some of these poisons, when introduced into the body, can *once* produce their characteristic effects, but no more. That peculiar element in the body, which the specific poison finds for the deposition and incubation of itself, seems to be destroyed by the first contact, the body thereafter, being free from the ravages of such a poison.

DR. ARNOTT'S MIXTURE.—Local anæsthesia. Mix equal parts of pulverized ice and common salt, put them into a bag, and apply the sack to the part to be rendered insensible, not continuously, but alternately, for two or three minutes.

The great and quick degree of cold caused by the union between these two substances, is sufficient to render superficial parts and small members, insensible to the knife. With this mixture all minor surgical operations, can be performed without the least pain, and local pains can be abolished.

NITRATE OF SILVER.—Of this article HELLER gave to one case ten grains daily, for three months. During the time, not a trace of the drug could be found in the blood, nor the sweat, nor the urine, but all was found in the stools; but not in the same form, for he found it as a chloride. This change perhaps occurred in the stomach, where chlorine normally occurs. When this change does not occur, (SIMON,) the nitrate of silver is absorbed, and produces its peculiar *hue* upon the skin.

NEURALGIA.—Recent experiments with old whisky, very warm water, and loaf sugar, in doses, just inside of intoxication, the patient in bed and comfortably warm, go to show that they may often allay this lance of a disease, in a very few minutes. At least a number of cases have yielded, and have been wholly removed by them. It is necessary that the whisky be *old*, otherwise it will be too stimulating, the older it is, the milder, the more diffusive, and the more anodyne.

RHEUMATISM.—The Medical Reformer, in a late number, speaks as follows of cider in this disease:

‘I have been using cider in acute rheumatism, with much satisfaction. I think more of it than of lemon-juice. Either new or old cider answers equally well. It sometimes purges. I sometimes combine with it a little laudanum.’

As a beverage, it is the most wholesome known. To the stomach, it is—in moderate quantities—the most genial of all drinks. It should be more generally used. As rheumatism probably depends upon a faulty retrogression of the products from the muscular tissue, cider may hasten this, and thereby remove it.

ANTIMONY.—This drug, by researches of MAYERHOFER, seems to accelerate the destructive metamorphoses of certain elements of the blood. It does not, as far as its action is known, alter the red cells of the blood, nor the albumen, but reduces the fibrin to about a third its usual quantity. Coincident with this, occurs an increase in the urea of the renal secretion. It is doubled in quantity, under the use of this drug.

It seems then, to not only metamorphose fibrin, which is supposed to be the pabulum of the mechanical tissues of the body,

but also to aid in the retrogressive current of the products of waste from the nervous, and muscular, and cellular tissues.

COMPOSITION AND DECOMPOSITION.—Within the human body these two processes are ever occurring. One is tissue-making, and the other is tissue-unmaking. One makes the animal machine, and the other tears it down. One deposits power, the other sets it free. One renders force latent, the other renders it active. Nutrition, then, must precede disintegration. The former is the type of the vegetable, the latter is the type of the animal. The animal sphere lies in destruction, while the vegetable lies in construction. The vital *use* of an organic body, is obtained by disintegration, for by it force is generated. Without power the animal sinks back into the vegetable.

In Therapeutics, these processes have to be modified. In some diseases, disintegration is not sufficiently rapid, and in others, it is too much so. Also, in some states, nutrition is too abundant, while in others, it is deficient. Medicines may be invoked for the modification of these excesses and deficiencies.

From the researches of BROECKER, *wine, sugar, coffee*, and perhaps *tonics*, diminish the processes of disintegration; while *antimony* and *mercurial* preparations, according to MAYERHOFER, favor the processes of waste. Again, nutrition is favored by the first class, and antagonized by the second.

OXIDE OF ZINC.—According to HELLER, this drug when administered, passes the bowels without the slightest loss, and without alteration. He gave it in two drachm doses, twice a day, and found daily the same amount of the drug in the stool.

TOXIC POISONS.—This class of mischievous articles is large. They differ from the Zimotic—they are not specific. They seize upon all parts of the body. They are dangerous in proportion to the quantity. In their career they exhaust themselves. They have no power to continue their species. They act upon chemical, sedative, and irritative principles. They do not require a nidus for the evolution of their mischief. They can repeat their devastating phenomena in the same body, indefinitely. They may be evacuated from the body. They may be, some of

them at least, neutralized in the body. They include acids, alkalies, irritants, anæsthetics, potent relaxents, narcotics, and agents that possess strong affinities.

ELEMENTS OF DISEASE.—Besides the *external* causes of disease—the zymotic and the toxic—there are *internal* elements of disease. Some of which may be specified, viz., deficiency of calorification, excess of calorification; deficiency of irritability, excess of irritability; deficiency of contractility, excess of contractility; hypertrophy; atrophy; degeneration of tissue; deficiency of vegetable food as in scurvy; excess of albumen, oil and starch, as in arthritic diseases; deficiency of oil and phosphate of lime, as in tubercle; an excess of red cells, as in apoplexy; a deficiency of red cells, as in chlorosis; an excess of white cells, as in leucocythemia; a deficiency of fibrin, as in purpura; a want of the earthy salts, as in mollities ossium; a deficiency of gelatinous material, as in rickets; a torpidity of the hepatic ducts, as in jaundice; an excess of urea, as in uremia; a lack of inspiration, as in consumption; excess of carbonic acid, as in asphyxia; torpidity of liver, which causes the accumulation in the blood of cholesterin; choleic acid, cholic acid, and bilifulvin; torpidity of the enteric glandules, causing the increase in the blood of partially oxidized albumen; inactive state of the kidneys, allowing an augmentation in the blood of earthy salts, alkaline salts, ammoniacal salts, urea, uric acid, hippuric acid, creatin, and creatinin; sluggish condition of the cutis, permitting to accumulate in the blood, water, stale albumen, salt, chloride of potassium, oxalic acid, formic acid, acetic acid, lactic acid, and the alkaline salts; the embarrassed state of the lungs, favoring the multiplication in the blood of carbonic acid, water, salt, ammonia, volatile substances, nitrogen, and stale albumen; passions, cowardice, fear, despondency, and a want of will.

SLEEP.—The unwise of all economies is time saved from necessary sleep, for it begets a nervous irritability which masters the body and destroys the mind. When a man becomes sleepless, the intellect is in danger. A restored lunatic of superior mental endowments, said: ‘The first symptom of insanity, in

my own case, was a want of sleep ; and from the time I began to sleep soundly, my recovery was sure.'

Let this be a warning to all who are acquiring an education. Every young person at school should have eight hours for sleep out of every twenty-four, for as the brain is highly stimulated all the time, in the prosecution of study, it will break down, just as any other part of the frame, unless it have time for full recuperation. Better a thousand times to give another year to the completion of specified studies, than by curtailing sleep, to endeavor to get through that much sooner, at the risk of madness.

MODE OF TESTING THE TRANSLUCENCY OF HYDROCELE.—As ordinarily employed, by placing a candle on one side of the tumor, and excluding the passage of the light laterally by means of the hand, it is, at best, a clumsy proceeding, and liable to errors. I have found the stethoscope much more useful, as a means of excluding the diffused light, and by applying the eye to its expanded bell-shaped portion—the ear-piece being firmly placed upon the scrotum, held in a tense condition—we can even map out the state of the parts with tolerable accuracy, if the contained fluid be of ordinary character, and detect the condition of the testicle by the opacity it produces, especially when it occupies any unusual locality, as the front or sides of the scrotum, or is adherent from inflammation after previous tappings. We can employ either a lighted candle or bright sunlight, as our best means of obtaining the requisite illumination ; but even in diffused daylight, I have succeeded very well in the manner I mention.—DR. W. FRAZER, in *Dublin Hospital Gazette*.

INVENTION.—AMBROSE FOSTER, Portland, Dodge Co., Iowa, has discovered that if one part of lime, and twelve parts of sand—both dry—are mixed, and run into molds of any shape, and subjected to a pressure of one hundred and twenty tons, a whitish brick is the result ; and when piled up so as to allow air to circulate freely, soon begins to harden, and in a short time brick thus treated to the air, becomes as solid as stone. The lime absorbs the moisture of the air, and takes up the carbonic acid, and solidification follows.

T H E

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VALEDICTORY ADDRESS BEFORE THE AMERICAN
MEDICAL COLLEGE.

BY GEORGE W. CLARK, M. D.

Days, weeks and months, the common links that form
Time's fleeting chain, passing swiftly along
From life into the past, have brought to us
Another session's close.

And here, to-day, within this spacious hall,
We've met, not the hour in idle jest to spend,
But to think and talk of things, which, though past,
Are worth the trouble of a retrospect.
To talk of things, which, like a living soul
That lights the chambers of some happy form,
Fill up the moments of the present hour—
To talk of things, which, though they may but form
The feeble twilight of our future hopes,
As life-preservers to our forms, they'll serve
To buoy us up, when all around us lash
The ugly waves of a tempestuous life.

As we have met together here to part,
To go, each from the others far away;
To meet, perchance, not on the earth again,
'Tis well, that in the present hour—thoughts,
Fond reminiscences of things gone by—
Of hours whose light still shines upon our paths,

Should find a place. Ere leaving those we love,
We wish to call up all the reasons why
Kind feelings we had ever had t'wards them,
So that in leaving them, we may not leave
With them, all the good thoughts we had for them.
Although to part is but a moment's act,
To say farewell, the labor of a breath,
There is in it, if it is rightly done,
Effects, that will as long as life remain.
There's naught, it seems to me, that does exert
O'er our lives, a more benign control,
Than to be able to recall to mind
The parting whispers of some kindred shape.

Kind friends, back in the history of our kind,
Far back, amidst accumulated lore,
Which has for ages piled upon itself
The history of our origin, you'll find;
And, to the Medico-Historic mind,
It is a point of interest, to trace
Along down through the lapse of ages past,
Our history, down to the present day;
To trace the curious chain of rising thought,
The labored march of scientific truth,
While struggling through the opposition formed
By ignorance and prejudice combined,
Which crust it o'er, as grosser earths incrust
The strata of the purer ore beneath.
To see it rising up before men's eyes,
Well polished by the friction of its rise;
Truths, which were simple as our being's laws,
As plain as the broad light of noonday's sun,
Resting upon, and forming, as it were,
Of things around, the only part, of which
The truly philosophic mind would think,
As worth the time and trouble of a thought;
Yet, of them, a single one to verify,
Though plain as trees within an open field,
To have the world acknowledge it as true,
And it, inscribe upon its page of facts,
Was not a single hour's pleasing task,

Performed by congresses of common men;
But by a very few—of whom, the world,
While they were living, took but little note.
By their self-instituted modes of thought
Has each new path within the mental world,
First been marked out; and when the paths were plain
Then followed on the common mass of men.

When the Nile overflowing at its head,
Had, with its liquid streams ofttimes deluged
The sunny fields that line Egyptian shores ;
Egyptians, prompted by necessity,
Sought out such parts of plain geometry,
As would, when from their lands the liquid sheet
Had passed away, enable them to tell
With greater certainty, the exact lines
Which once had marked the limits of their fields.
So men, perhaps by nature first endowed
With proper sensibilities, and each
A perfect instrument through which to act,
Not guarding well those many parts that form
The bulwarks of the constitution's power,
Nor well those avenues which constitute
The portals where infections from without,
Waving in subtle currents through the air,
Or rising from secret lurking formites,
Might find admission to the parts within—
Were by diseases racked. To mitigate
The pain which seem to lance investing parts,
To burn the vitals from their place within,
Or dart from center to periphery ;
To quench the heat which like a sheet of fire,
Seemed great enough to roast the frame entire ;
To give new action to declining parts,
In others, counteract too great excess,
They sought out things whose potency, they thought,
Was equal to the curing of their ills.
In nature's fields, upon the lofty hills,
Within the shady realms of sylvan glens,
Amidst the ragged rocks of beetling cliffs,
They sought in things for a restorative ;

Some even burrowed down into the earth,
And, working underneath her granite ribs,
Dragged from her bowels, things, such as they thought,
Possessed of healing power—*multum in parvo*.
So it would seem that stern necessity,
Mother of inventive ingenuity,
Was first to teach to man the healing art.

Slow was the progress on in medicine.
Age after age passed rapidly along ;
And like the fairy objects of a dream,
Haunting at midnight some restless sleeper's brain,
They chase each other on into the past,
And in its gloomy distance disappear.
Men were born, for a season lived, and died.
Whole generations, like the annual plants
That clothe the surface of this mundane ball,
Rose up, looked on the earth, and passed away ;
And still, men knew but little more than that,
Which had for years been common to mankind.
A stranger-thought into some thinking mind
Occasionally crept in—from them was thrown
Into the common garner of the world,
And thus increased the common stock of thought—
Some looking out upon the elements
Which crowd into the space around, and form
Of things, the signs of their realities—
Sought there to find some thing whose magic touch
Transmuted everything to purest gold ;
Though they, among the elements, did not
Find such a thing, by their experiments—
Though first instituted to discover
Some chemic power—some strange process of change,
Thought to reside as dormant in some mass—
They did unfold new truths before unknown ;
Strange laws of action were brought out to light ;
Anomalous affinities were seen ;
Things thought to be mere simples, were split up,
And everywhere new elements were found.
Mankind grew wild ; but with their wildness grew
Their knowledge of the inorganic world ;

While some there were, who turned to earth their thoughts,
And in its natural laboratories, searched
For things of interest. Others there were,
Whose minds returning more into themselves,
Saw, within the forms they animated,
Maneuverings of a curious power.
They saw, arising from a central mass,
Tubes, which, ere they had reached more distant parts,
Split up into a thousand smaller tubes;
Into whose cavities a crimson flood
From out the hollows of the heart did flow;
Frolicked all the livelong day, and at night
Ran back into the place from whence it came,
There to recruit its wasted energies.
So thought they till HARVEY, God's make of men
Arose. He thought it were not criminal
For man to think an unthought thought. He thought
The blood did circulate. This thought he taught.
And for its simple teachings did incur
The enmity of those too proud to learn.

Man, in the animated tribes of earth,
For want of wisdom, or from mere neglect,
Not finding things of worthy potency—
Things that possessed that untold kind of strength;
That unique, special adaptability,
By which they could into the body's parts
Insinuate themselves, and by a power
Peculiar to themselves, exterminate
Each particle that counteracted health—
Not finding such, and looking on disease
As the great *malum in se* of the world—
Which to counteract, requiring more
Than the inertia of the juice that formed
The sap of plants, which altogether made
The common food of common animals—
He sought a more *heroic remedy*.
In realms of the great daylight of our God,
Where Heaven's breezes blow one source of health,
Where grow the food of animals, of man,
And, where they, growing sick, would likely find

The remedy for each disease at hand—
He found not such a thing. He did not see
That in this, as in every natural
Thing, adaptation's fundamental law—
Which is as boundless as is nature broad—
Does equally obtain.
Mankind were placed upon the earth by God ;
And everything around, above, below,
Arranged with such an ingenuity
That there was nothing wanting to make up
The list of things adapted to his wants—
Not they adapted to his wants no more
Than he, unto the forms which they assume—
Each, by his God, was at the first endowed
With a living, thinking, reasoning part—
With a being increate, immortal ;
Of substances celestially prepared,
By wisdom infinite, wrought out, a *Mind* ;
And with five exquisite senses, through which
Each serving as the handmaid of the mind,
Ideal pictures from the world without,
Could flow along into the mind within—
A motive power, nobler yet than all
Inborn within the substances of his soul,
Enabling him at will to move his form,
And go whither his fancy might direct.

The eye, of optic instruments the first,
Was, when first formed, adapted to the light,
And not the light adapted to the eye :
For light was, ere the eye first sought its rays ;
And so the labyrinthine rooms that form
The chambers of the inner ear, were not,
Until the trembling atmosphere had borne
The dulcet notes of sighing winds above.
The air, surrounding man, was ere his birth,
And to its gaseous constituents
The little air-cells of his lungs were formed,
That he, life's normal standard to uphold,
Of its caloric power, might receive.
The nerves that loop around the fibers small,

Or creep among the papillary cells,
As rapidly, as news transmitted by
Electric wires—tell the mind of what
May chance be near unto the form without.
Those organs of the man, whose duty 'tis
Prehensively to seize, of substances
That part, of which the body makes its food,
And which the building up processes need ;
In their relation to those things around,
That form for them their natural element—
Show an adaptability, of which,
My feeble store of words can little tell.

Where man has found a place to live,
'Mid polar snows, or burning desert plains,
Or 'twixt the two extremes, it will be found
That his Creator, knowing all his wants,
And prompted by a charity that is
Peculiar to a Deity alone,
Has, in distributing created things,
Consulted such an order, that there's found
Where man is found, conditions that are rife
With strength to bring his being into life,
And which, when once obtained, continue it.

The tender little tunicked bulbous root,
Which, year by year creeps down into the earth,
Or marches slowly on in annual strides,
Made not alone to show its mode of growth,
Serves well to satisfy man's appetite.
The ranks of forest trees—the sturdy oak
Whose columned strength mocks at the flight of time,
And all the lower ranks of woodland trees ;
As well as those transplanted by man's hands,
Live not alone to shoot their branchlets up,
As index fingers to the stars above,
And to the God who first to them gave life ;
But also serve in their autumnal crops
The better end of giving unto man
Those elements in which he finds support.
Where burning suns shine straight down on the earth,

As if to crisp it to its very core ;
The long leafed Talapot, the Banyan trees,
Each with its hundred sister trunks, spread out
Their foliage, and with it overroof
The habitations of those living there;
And, in those sunny climes, where burning thirst
Oft stings the lips, there, growing, do we find
The Nepenthes Distillatorias' cup,
Filled with the purest liquids, well designed
The gnawing thirst there felt to satisfy.
The Cocoa-nut, as if to imitate
Man's first food upon the earth, is there found
To fill its lactic cup, which serves alike
As food for common animals and man.
Those little endogens that, trembling, peep
Out from the bosom of their mother earth,
Enfolding all the hills in grassy robes,
While they do serve, of light, its varied hues
To blend and temper it to suit the eye—
To cushion off the surface of the earth,
And render less the joltings of man's life,
They indirectly serve to render much
Unto the common comforts of man's life.
Reciprocating to man's mode of life,
Does nature's middle kingdom ever serve,
In drinking up carbonic acid gas—
Which gas, though food to it, will poison man—
To purify the air, and make it fit
For purposes to which applied by man ;
But its reciprocating acts do not,
With this sole act of good to man, quit off ;
For it, for man, gives out pure oxygen—
That which keeps up the normal heat of life,
And tones to act each slender fibrula.
So it would seem—as every one can see
Whose light's not dimmed by pride or bigotry—
That every part anatomy reveals ;
That every function of the living man—
Chemical, mechanical, or vital—
Has been adapted to surrounding things.
His food, of elements of proper kind,

He finds oft growing near, indigenous.
He does not need, in fact, to seek, in deep,
In subterranean strata of the earth,
To find his stomach's proper irritant ;
Nor does he need to wander far from home
To search in distant climes for luxuries ;
For, where by any natural cause, has man
Been brought, there nature yields his true support.
The process of an acclimation proves
That nature recommends few foreign things.

All men seem born to die. They, during life,
Are subject to the pestilential blasts—
To deadly currents creeping through the air—
Arising from no cause, perhaps, in them ;
But from some secret cause, in earth, or air.
Although man's born to die, he's formed to live,
Until the measure of his life is full—
Until the indications shadowed forth
Have, in his acts, found their fulfillment quite.
Then is it not correct to say, that man,
To live and fill the measure of his life,
Has round about him things to counteract
The frequent early tendencies to death ?
Where things which give and keep up life abound,
There those which counteract decline are found.

Many men, losing all that childlike thought—
That native candor and simplicity
Which asks the reason why, of each effect—
Seemed to regard the laws of life and health
As formed for mingled incongruities ;
As some great heterogeneity
That was incomprehensibly obscure.
And on disease, though should it only be
A slight infraction of a normal law,
And which, if left alone, would of itself
Run right straight back into a state of health,
They seem to look as though it had been like
The great Gorgon Medusa of the East,
Whose fearful strength for ruin to oppose,

Required things of greatest puissance.
Not noticing in man that innate power
Which ever tends to heal abraded parts—
To cast off all offending particles,
And in the part uphold integrity;
Nor well the influence direct of Mind—
That higher, ruling, overseeing power,
Which, through its proper avenues sends out,
Such agencies into the many parts
As may sustain integrity in each;
And watch the action of the chemic powers
To limit them, each to its proper sphere—
To keep their elective affinities
From tearing down such vital parts
As they should each by stimulus uphold.
Not noticing in man that singular trait,
That restless longing for a certain thing,
Which, to the philosophic eye, points out,
Ofttimes the thing that 's needed for a cure—
Not seeing in those humble plants, on which,
Regardless, tramp both animals and man,
A sovereign remedy of certain cure—
Not thinking that within the petaled cup,
Nor in the germ on which it sat a queen
Extractive substances subrosa hide,
Possessing in themselves that which would aid
In casting off, from man, besetting ills ;
They dug down through the gravelly beds of earth—
From parts, remote from the rude gaze of man,
Hydrargyri they brought, which, they did make
To fill each indication for a cure.
One part of it, with an equivalent
Of simple chlorine gas, did form for them,
Although not much unlike a deadly mass,
The battle axe with which they fought disease.
Although it was a thing as fickle as
The changing currents of the subtle winds,
When constipations bound or lymph glued up,
To each, they freely gave Hydrargyri.
Though it, in wandering through the human frame,
From its great appetite for chlorine gas,

Picked up, of that which formed of salt a part,
Such particles, as would transmute it soon
To that, that's called corrosive sublimate;
Which, like a gnawing cancer in the heart,
Would in its turn eat out the vital parts—
Though these effects, that sorrowed oft the heart,
That pained the victim and his friend alike,
And broke the earthly ties of many souls,
Looked right straight up into their very eyes,
They still, at each escaping sigh, would give
A portion of Hydrargyri.

There have been men, to cure, what needed nought
Except the living principle of life,
Which is, of healing agencies, the first,
Or some slight aid from life's auxiliaries,
They plundered in life's crimson reservoir.
That blood which first beat from the fetal heart,
And reared, progressively, surrounding parts;
Which, when materno-fetal links were broke,
Kept up the infant's isolated life;
Which, welling up from out the ventricles,
By its convecting power, brings supplies,
Which, by cell action, gradually extend
Each part, each way, until the form has reached
The full grown stature of a perfect man.
That blood, which, to give place to each new thing
It had marched us to fill a vacant place,
By solvent powers, mostly chemical,
Takes up each particle whose function's filled.
(Some particles that swim in the blood mass,
With oxygen, which had, through pulmic veins,
From outer air, by endosmose been brought,
Unite; thus by combustion forming heat;
Which does, in health, in every climate, keep
A temperature of ninety-eight degrees.)
That blood, which, when the slightest breach is made
In any part, it serves as janitor,
Sends out its particles, which swiftly run,
As good Samaritans to fallen man,
To mend with stores it gives, but does not sell.

That blood, without which man is quite inert,
Where some men medicate, is never safe
Against the cutting sides of lancet blades.

The school, of which, I am a feeble bud,
Forms only one among a number great :
'Tis but a link in that great chain of schools
That binds in one, the present and the past.
Since man first sought to teach the healing art,
Schools have progressed in number and in kind :
Each seemed to think, in their instruction given,
Were taught, of modes of cure, their basic truths ;
That they, not seeing as all others saw,
Saw things all others did not see.
Though, to relieve, when man complained, by things
Such as they each could find, could grasp, could give,
Seemed the main object of their thoughts and work ;
In unison they could not all proceed.
Each were composed of men that were endowed
With all the feelings common to a man ;
With all those prompts to action that were given,
By God, to man, that he with other men,
Might act, through natural modes, in harmony ;
That he, too noble for that meaner mind,
Which would, with meaner acts, forever blast
The noble prospects of a thinking soul ;
That would drag down an angel from the skies,
Because, it, was itself too gross to rise ;
That he might sympathize, also, extend
A helping hand to every lagging friend.
Each were, by God, endowed with powers of thought ;
A memory, in which to keep the part ;
A hope to cheer when gloomy clouds o'erspread ;
A love, to give to life its sweet perfume ;
A faculty, to lead, through nature's works,
The mind up t'wards the great Creator, God ;
Combativeness, invasions to resist,
But not to use in acts of tyranny ;
Pride, his human nature to enoble,
Not to inflate it with mere vanity :
True pride, gives greater strength to manhood's tower ;

False pride digs under it to let it down.
As insects in the nodes of growing wheat
Drink up the life ascending to the germ,
False pride, that burrows down into the heart,
Blocks up the paths of truth into the soul.
Though every man, of which the schools were formed,
Was, with such faculties, in life, endowed,
That would, through unperverted action, prove
The agencies of perfect harmony ;
The history of the past will clearly show,
That by some strange perversion of their minds
From prejudice, or some transmitted cast,
Each other to oppose they were inclined.
One school asserted, that diseases rose
Out of the human body's fluid parts,
And were transmitted down, link after link,
Until the grosser portions were involved.
Another said, that in the solid parts
Was found the womb of every malady.
Not, as the candid mind, did they proceed,
The doubtful point the sooner to decide,
By happy mingling mildest thoughts and words,
And, if contending, not in strife or hate—
Wholesome debate exhibits either side,
Illuminates the true and false of each,
And draws between a medium line of truth.
An angry mode of converse always tends
To banish sober thoughts, and quick inbreed
Within the mind the elements of strife,
Which print the signs of hate upon the brow.
'Tis true, 'twas well, that with some energy,
Such thoughts as they thought had some claim to truth,
They should sustain ; for truth, however good,
Without man's aid, with many minds, is weak—
Much weaker than an unassisted lie.
But, 'twas not well, that in their search for truth,
However good the cherished object sought,
Their energy should lead to angry thoughts.

In every school much truth there does exist.
'Tis hard to find a thing completely false—

By each, some truths, to others yet unknown,
Through thought or accident, were first discerned ;
Which truths they claimed as their own property.
Some schools, unlike the true unbiased mind,
Which sifts all parts to find the truths in each ;
More prone to find a fault than see a truth,
Saw all the faults of other schools, which faults,
To them, obscured the truths they each possessed :
They being right, others, they thought were wrong ;
And seeing others wrong, sought to destroy,
By all the weapons of a vengeful soul,
The base, on which, their superstructure's laid.
Some, breaking off, went to utmost extremes ;
Rejecting common medicines, they taught,
That in the elements there could be found
One thing alone, possessed of curing power.
Aqua, an active agent on the earth,
Relieving thirst in man, and washing off
The old formations from the body's parts,
Imparting heat and tone when coldness numbs,
And cooling down when fevers fiercely burn ;
This, than which, a better is hard to find,
They taught, and yet do say, alone contains
Conditions for a normal cure.
As youths, when first into the world they go,
Having, of thoughts, but one, and that of self,
Look ever ranks of giant intellects—
See nought in them that's worthy of a note,
And none as big as their expanded self ;
So the sole thought of water's cleansing power,
Which power, though good, forms not the sum of power,
Has caused the Hydropathist to overlook
The life-assisting springs in other things.
As water, while it cures, serves us as food,
So other things, that act the part of food,
Do also tend to rid us of our ills.
Man, in his natural habituates of life,
And animals among the higher ranks,
Have found in other things, Aqua except,
That which possesses of healing power much.
Diseases follow lack of certain food

Which, when supplied, is the true remedy :
Here lies the secret of some modes of cure.

Some men contend, that of diseases, two,
Together, can not act within the form :
That, while within the citadel one stays,
As enemies all others are repelled :
And to dislodge one from its hold within,
We need but introduce another one.
It is an axiom in philosophy,
That no two atoms can at once crowd in
And fill a given space how large or small.
When ill invade realms by the mind controlled,
Their sickly sights of waste to spread therein,
By changing fairest parts to forms grotesque,
The life, that crystal which from God outsprang,
And which to build and mend makes not less great,
Enlisting all its force, forthwith goes forth,
The acme of its power to exert,
In making battle on encroaching ill,
Its fair domains untrampled to preserve.
In wrestles 'twixt disease and life, disease,
Though oft times self-exhausting in its acts,
Where life is weak, may end the strife in death ;
Where life is strong, it may be hurried out,
Or die within, ere vanquished life takes leave.
A lightened function, or a new outlet
The life oft makes that ill may outward pass.
Life, with disease its mortal enemy,
True to itself, to conquer, seldom leagues.
Those plans of cure that life adopts, if we
Would close observe, and imitate as close,
We, ill to find, would not unmeet men's bones,
But meet them o'er in driving out the ill.

There is a school which claims no reverence
For age, because it is a youth in years :
It boasts no lengthened lines of students' names,
Nor of a mine of inexhausted wealth ;
It claims to know, not everything that's known,
But part of medical philosophy :

It looks on man as a progressive thing,
With power to learn, yet limited in thought,
And as a human liable to err.
It looks on other schools as formed of men—
Men who have minds, can think, and know some truth—
Men who look each through different pairs of eyes,
And hence may have, of things a different view.
Of things, if other schools have other views,
Them it regards as having different sight,
And liable to see things it saw not.
At each suggestion others make it looks—
Tests each, by some process of thought, for truth—
Receives the truth, if found, and grumbles not,
Because some other chose of things to think.
It looks upon all schools of medicines,
As members of a common brotherhood,
That should, as kinsman round a family hearth,
Regard each other in a friendly light.
As misers, grasping tight their coffered store,
It does not covet what of truth it has ;
Unbolted doors invite all other schools
To come, and hear, and learn what it may give.
To teach the true philosophy of cure,
That man may drive away the racking pain—
That he may live out life and serve its ends ;
To teach the world by actual precepts given,
And by the power of examples set,
That schools may tolerate all other schools,
And all their independence, still retain ;
To teach men that mere drugs will not suffice,
Without philosophy, to cure their ills ;
To elevate the thinking part of man—
To which, all other things are atoms each—
By giving it, as it receives its food,
Its proper nourishment, the candid truth ;
To sift out from accumulated stores,
Which men in ages past have gathered up,
That which is good, and from surrounding things,
Obtain new agencies of cure ; to teach,
Of each, its *modus operandi*,
Are objects of the School AMERICAN.

PROFESSORS KIND :

Deep in the bosoms of the present class,
 Within their hearts, as warm as life, there lives,
 A multitude of friendly thoughts for thee,
 Which shall not die but live as long as life.
 As on the bosom of the passing cloud,
 Electric fires write their motive laws,
 So, on the tablets of this class's minds,
 In characters, stamped down into the soul,
 Your Lectures' vivid truths are registered.
 Long as the pulse, the pendulum of life
 That beats away the seconds of life's years,
 Remains unstilled by paralyzing death ;
 So long shall in our minds their truths remain.
 By precepts and by wise discourse you have,
 Within our minds implanted many truths,
 Than which, no other things we higher hold—
 Truths which are noble as mere facts can be ;
 Immortal as unchanging laws of things.
 You have, a love of truth, in us aroused ;
 Taught us to pass false nicety, by which,
 Things worthy, unobserved, are often passed—
 To seek realities wherever found,
 And such are found where God has filled a space—
 To look alike in palace and in hut,
 In man as mendicant as well as king.
 The meanest form of man, though to the eye
 Of thoughtless ones, is a disgusting thing,
 To nature's child presents some wonders rare.

You taught our eyes to meet the lightning's glare,
 As down from clouds, through air, to earth it leaps ;
 To see in it, though a familiar scene
 That scares the timid people of the earth,
 The workings of those subtle elements,
 Through which, in nature and in man, do pass,
 To grosser links, in the great chain of things,
 The power of motive agencies beyond.

Through realms of light that half begirt the world
 And chase the night along its diurnal track,
 Our eyes to stray you have taught us to teach,

To feast upon the rainbow's hues, and tell
How light through transient drops is decomposed.
By light, through your insight, in light,
Acme in speed astonished we observe.
Also, of nature's middle kingdom, here
The life-inspiring fountain head we see.
Lights, thermo, chemic, and magnetic powers ;
The solid, liquid, and the gaseous forms ;
Affinities that form their kindred ties—
Of these, that singular freak isomerism—
The laws of definite proportions, you,
Before our minds, most vividly have brought.
From thoughts of gain and show our minds you've turned,
Down to the earth, to view the beauties there ;
To watch the seed, within whose tiny shell
Lies hidden forest oaks in embryo,
As it into the earth descends : to see
The principle of life first move in it—
That singular impulse in organic things—
Its plume seek light and air in space above,
Its radical descend in earth for food.
Our eyes were taught to look upon
The flow'ry fields that bind the world in wreaths,
And form on it, of it, its fairer part.
The tinted petals in their calyx robe ;
Within, the pistil with its stamen guard ;
The germs, the object of their constant care ;
The roots, that drink up life out of the earth ;
The leaves that breathe the carbon from the air,
Point out the families of which they're part.

Those laws of life, of Physiology
Whose action keep up life, inaction, death.
The daily action of prehensive power,
Digestion, and absorption, followed by
Diffusion, and the cell formative power.
Cell evolution, and transmutation
Of lifeless masses to those having life.
The keeping up, by these, of living parts,
By giving each its elements of life,
And keeping up in each a proper heat.

The source of motive power. Those agencies,
By which, each part that moves, is moved.
Hygienic modes of life : their opposite
Which change the couch of ease to one of pain.
These, have you labored to make plain to us.

PROFESSORS KIND :

Ere we would say farewell to you, we'd say,
That for instruction kindly to us given,
Of golden stores but little can we give.
Though men grasp gold in preference to truth,
In gold, the smallest truth has naught of price.
Though men would starve to death upon mere thanks,
They're all we have to give you in return.
You have our thanks, also our sympathies,
If aught of worth, we cordially extend.
To tell you all we feel we have not words ;
In the deep throbbing of our hearts—within
The feeling realms of our souls, there is,
That which, by words we fain to you would tell.
Between the kind instructor and the one,
Who has, with willing ear, day after day
Drank in his wisdom, and felt all his force ;
And by that wisdom feels his mind expand,
His moral and his reasoning parts grow strong,
Ties do exist, strong as an iron band :
Strong as affection 'twixt two kindred souls :
Strong as the love of life in drowning man.
To-morrow morn, we all from here go hence,
We all go home, we leave each other then,
We part. Oh how subduing is the thought !
The man it does unman, makes man a child.
It drags up all the feelings to the throat,
Which block up every road to utterance.
We part, miles linked on miles may intervene ;
Years, long chains of years may flow in between—
Eternity, our lifetimes may succeed ;
But memory, faithful to her trust, will not,
The AMERICAN and its Board, forget.
We part. May those great spirits in your forms
Live on. In vigilance and power increase,
To plant the truth, and guard it where it grows,

*Independence and Toleration teach,
If our last wish, Farewell.*

FELLOW STUDENTS :

Men in life must live ;
And those not blessed or cursed with much of wealth,
By necessities from man's mode of life,
Are forced to seek some means by which to live.
The first great source of life to which men look,
Is earth. Its plants and shrubs, that radiate,
From center out, each on its line of growth,
That grow of culture or spontaneous,
Do ultimately form man's source of life.
The third great kingdom of created things
Lives on the second and upon itself.
As men increase in numbers and in thought
Their needs keep regular pace. Some men hew down
The wood, and plant their grain where it had stood.
As some do sow and reap, others do build ;
For man must have a roof to shelter him.
Some build up garments for the body's use.
Some grow sick and need a healing power.
The true foundation of the healing art,
Is based upon the fact that men grow sick.
So it would seem that some are really called
Into the sphere of life to which you go.
Within my mind it is a query now,
Why, you of medicine, have sought to learn.
Does in your vital parts some ill reside
To drive out which some method you would learn ?
Is it the palid cheek, the sunken eye,
Emaciated tottering forms of men ;
The starting blood, the panic it excites ;
Corruption creeping round among the veins,
And breeding abscess in the various parts ;
Consumption's ghostly, gravelike, forlorn look,
That minds one of the death approaching all,
That won you from the light and smiles of home ?
With these would you familiarize your eyes ?
Is it the shriek from lancinating pains ;
The sigh, the groan, from dull burning parts ;

The hurried breathings of the dying man ;
The last low whisper taking all his breath ;
His painful exit from his carnal house ;
The tears, the doleful wails of kindred groups ;
The touching prayer when death stands victor by ;
The bell's slow chime, that says a soul has gone,
That forms the star along whose course you move.
Of these, would your daily music make ?
Is it, that you may meet of human life,
Its stormy part ; that you may battle down
The great Malacoffs of disease and death ?
Is it that you may meet the scoffs, the prejudice,
Which, thick as stars at night, will circle you,
That you a place in the profession seek ?
If such your wishes were, brave are your hearts.
This dreary scene we pass, another comes,
With brighter disk, whose light reflected, show
A fairer scene ; on which it will be seen,
The field, that your profession opens out,
Is broad as the great basement of the earth.
The laws of every science shed their light
To brighten up your onward course through life.
To find most remedies, in Botany,
You find an index pointing many out.
That science, than which none there is more fair,
Will lead you out into the flow'ry world,
Where sweet perfumes are breathed out on the earth :
There, as you search for things to cure, you will,
In searching, deeper stamp into your minds
The laws of that fair science, Botany.
From the sick room, it will be a pleasant thing,
To turn away, and spend a little time
Amid the flowers of the woodlands near ;
To trace the variegated hues which mark
The finest touches of artistic skill—
Which, to well imitate, lies not in man—
To watch, when inflorescence is complete,
The pollen yielding life to neighb'ring germs ;
The tendrils reaching out and grasping hold,
The twining plant, the better to sustain ;
The seed, on wings, through air, seek elements,

Where it, to its own kind, may add a plant;
Or clinging to some locomotive thing,
Find a good passage to its future home;
Or by elastic pericarps spring forth,
Or swimming, reach some place to germinate.
Your paths will lead you into chemistry,
The laws of which, do form a base on which,
The rationale of many cures do rest.
Most particles, which men do eat and drink,
Ere they exert their ultimate effects,
Pass through some chemic change, which, if you know,
And what results from them, you are prepared
To give strength and support to every part.
One thing, present or gone, may cause disease;
If human chemistry be understood,
That thing may be supplied or driven off;
Thus you a philosophic cure may make.
Some give a nostrum for a dozen ills;
The nostrum they compose of many things;
Which things, though good alone, or rightly joined,
May, in the nostrum, by affinities
That may exist as permanent in each,
Destroy in all their tendencies to good.
Then he should know, that forms a medicine,
What chemical reaction will take place
'Twixt different articles he mingles in.
As you through life must battle with disease,
And as diseases live in human forms,
To be successful in dislodging them,
Or on their near approach in warding off,
Inductively will you be led to seek
A close acquaintance with the human form,
Its bony structure, skillfully put up,
Together tied by ligamentous bands,
Moved by the muscles, nicely interspersed,
Which do, in turn, from mind, through nerves, receive
Electric currents causing them to move.
The human form is worthy of your thoughts;
For it's a perfect little laboratory.
Within the blood, hydraulic laws obtain.
Reflection and refrangibility,

Are optic laws seen perfect in the eye.
A drum, in the meatus of the ear,
That vibrates to the gathered waves of air.
An instrument, the vocal box contains,
That, through the diatonic scale can pass,
Make music suited to the thoughts within.
Within the lungs, the laws that make each gas
A vacuum to every other gas,
Is found, among the cells, exemplified.
On the external man the fluid part
Forms vapor, taking off, as latent heat,
Caloric, which if left would cause disease.
You from your *Alma Mater* each receive
This day, a DIPLOMA; and what is that?
It is a parchment that 's inscribed with words
Which show, those whom it may concern, that you
Have studied medicine, and did receive,
From those, from whom you learned, certificates,
That you not only heard and read but learned.
'T is true, with those who see not very deep,
That one who bears a parchment, though he is
In true philosophy but a mere youth,
Is looked upon as one that must be learned.
With men of sense 't is but a little thing.
'T is but a parchment covered up in words.
They, by one's acts and words, can quickly see
If study has imbued his mind with thought:
And if it has, without a parchment, they
Can give due credit to each worthy trait.
Think not that it will your success insure.
Success depends upon the powers within;
Upon the knowledge you may bring to bear;
Upon the energy you manifest.
The mind that shrinks when difficulty comes,
The obstacles in life can not surmount.
I will, brought down the Alps into a plain,
O'er which Napoleon and army passed.
Do one thing well: naught else until it's done.
When done, do something else: do it as well.
Think what you speak: speak what you think: think right.
Have all the independence of a man.

God made you not to be a cringing slave,
Be then as free as God made man to be.
Think different when other men think wrong,
Tell them they 're wrong, but do it with respect.
What you do learn, learn right : what wrongly learned
Is harder to unlearn, than learning right.
When reason teaches you a thing is right,
Believe it 's true, though others think it 's wrong.
Place high your mark : aim at the highest star :
No lower mark intend : an aim below,
Strikes underneath, and is an aim too low.
No missile strikes above the point of aim :
Beneath the stars you fall if so you aim.
The missile highest strikes that 's highest aimed :
Aim at the stars ; if them you fall below,
You higher rise than those who aimed less high.
To shine 'midst pebbles is no credit great :
To shine where dazzling diamonds flash is some.
Within the world of thought, be you a star :
Amid the constellations of that world,
Shine in the highest light that haloes each.
As the blind mole that roots down in the earth,
Spends all its life to hollow out a tomb,
Where it may live, die, rot, and be forgot,
Rest not in strata of the lower thoughts,
Where Godlike souls a crum of food finds not,
Where to expand is but as bubbles burst,
To change, to migrate to a meaner thing :
But passing such, as foreign elements,
As the great eagle of America,
Who, spurning FREMONT'S Peak as a mere hill,
With eye fixed on the sun, leaps through the air,
To bathe in ether by the sunlight warmed,
Rise you aloft : feed on the truth : make soul
The first in watchful care ; your bones the last—
Progression is the first in nature's laws.
Man 's a progressive thing, as all things else.
Let will be not less true to this great law,
Than are the blind, involuntary parts.
Progress : remembering that you were made
A little lower than the angel forms,

That live by feasting on that food called Truth.
Train Memory to spew corruption out,
And gag when loathsome error comes in food.
Allow no prejudice to overthrow
That which stands on a basement built of facts.
What 's good, encourage by your acts and words.
Discountenance each thing that tends to wrong.
Receive the truth. Reject each thing that 's false.
Your minds will thus be filled with useful facts.
Be kind to all, the lowly and the high.
Kindness is the Magnolia of the mind.
Kindness will sometimes win a friend for you,
Which mere scholastic show could not have done.
'T is not the wrinkled brow and crusty tone
That call out admiration from a friend,
Or give most pleasure to a mind within.
Some men have too much pride and dignity
To speak a kindly word, or lend a smile
To those below their rank—most needing them.
Be not too good. Do well; by treating all
As though each had a soul from Deity.
Forget not *woman*: she it is that gives
Those first impressions to the childlike mind,
That last through life—perhaps, eternity—
A taste for science and the beautiful—
A love of truth, if on her mind impressed,
Into the budding mind will be infused:
And 'as the twig is bent the tree inclines,'
So man, by starting right, may come out well.
Forget not those by poverty depressed.
Turn not away unalmsed the needy one.
If you have wealth, give part to those with none;
If you have none, extend your sympathy.
Do not forget the School that you now leave.
Its name should warm the heart in its last beat.
AMERICA, is the great fire-like cloud,
At which, the world as one great eye, now looks.
To be a Roman, once, was honor great.
Now, 't is as great to be AMERICAN.
AMERICAN—it warms the Irish heart.
The Dutchman blesses it within his soul.

Home ; its great hearth ; its circle of true friends,
Who smile, and friendly speak because they 're free
To eat, drink and act ; to breathe, speak and pray,
Is twined around the name AMERICAN.
AMERICAN to Liberty comes next,
For thoughts of it come up with Liberty.
Be each of you a good AMERICAN,
In principle, in practice, be the same.
Be true to self, to God, and to that name.
Life to enjoy, men say, they mostly live.
If you much joy would feel, do good to all,
A goodly deed, though small, gives sweetest joy.
Live not alone for self ; 'tis selfish life,
The feast eats best when it is shared with friends.
That life is sweetest, which with others blends.
'Tis wise to seek necessities of life ;
But 'tis not wise to think of nothing else.
Remember, that when dead, you still do live ;
That going out of life, is life begun ;
That you go to the next as you leave this.
Live then to learn, what's *noble, true and good*.
With these your souls imbue, that they may pass
High up along the scale of future life.
Here we must part, FAREWELL.

RHEUMATISM IN LONDON.—A short time ago the complaint was very prevalent, both among the young and old, in every part of London. Hundreds of specifics have been resorted to by different individuals to conquer this prostrating and tedious disease, without any beneficial effect. Artisans, laborers who earn their daily bread by manual operations, are badly affected, when they are visited by rheumatic ailments, which render them quite helpless. A correspondent can personally testify to the efficacy, and from his own experience, in the liberal use of lime (lemon) juice, while laboring under the paroxysm of rheumatism. By repeated indulgence in the simple acid, for the space of three days, avoiding all stimulating liquids, the most confirmed rheumatism will relax, and the tone of the muscular and nervous system be restored to its usual character. This fact was first established by

the circumstance of the Jews being scarcely ever affected with this disease, and this particular exemption from the malady under consideration, as affecting the disciples of the Hebrew persuasion, has been attributed to the very free indulgence in the dietary consumption of lemon juice.

MURIATE OF AMMONIA IN INFLAMED TESTES.

Mr. W——, about twenty-four years of age, was attacked with Parotitis, on the first of January last, brought about by exposure and severe physical labor. In a short time, the testicles became involved, for the relief of which the following treatment was instituted:

Dr. R. having charge of the patient administered an emetic and gave diaphoretic teas, for the first three or four days, with but little benefit. At this stage of the complaint it was thought advisable to change physicians, when I was called in, and found the patient in the following condition; headache, severe pain in the back and loins, pulse 110 per minute, tongue coated, skin hot and dry, testicles much swollen and very painful. Gave him a cathartic composed of podophyllin, half a grain, leptandrin one grain, rhubarb ten grains, to be repeated every four hours, till the bowels were freely opened. While taking the medicine, the alkaline hand bath was used in connection with pediluvium and sinapisms, to the parotid glands. After the action of the cathartic, he took of nitrate of potassa three grains, pulverized gum camphor two grains, ipecacuanha one grain, leptandrin, half a grain, every four hours, alternated with a teaspoonful of the following compound: sweet spirit of nitre 3ij, tincture of gelseminum 3ss, ipecacuanha grs. x. The testicles were suspended in a sling and enveloped in a poultice of hops as warm as could be borne, and frequently renewed. This application was continued about sixteen hours without much benefit, at which time a solution consisting of the muriate of ammonia, 3ij, vinegar, 3jv, water Ojj, was applied by dipping cloths in the solution as hot as it could be borne, and frequently changing them. The diaphoretics were continued until the pain subsided, the tongue began to clean, and the secretions restored. With these

simple local appliances and internal medicines, the testicles were reduced to their normal size, and all symptoms of disease removed in the short space of five days after he became my patient.

J. S.

THE CLAIMS OF THE "A. M. JOURNAL."

BY D. R. MALONE, M. D.

By permission, I desire to present a few thoughts to the friends of medical progression, in reference to the claims of the *American Medical Journal*. The *Journal* presents its claims to every devotee of Medical Science, and to all who favor progression in its art, and hence demands their cordial support.

It is indeed a grand radiating center, from whence emanate things new and old, pertaining to a liberal and scientific reform in Medicine; and what physician, desiring to keep pace with this age of progress in science, and maintain a healthy standing in the profession, will not avail himself of every opportunity for improvement within his grasp!

Every physician who is not diligent in his profession, and will not, through indifference or neglect, command every means of improvement, is behind the age—is indeed culpable, and censure just and true, will be his reward.

By the aggregation of atoms, large mountains are formed; and if every recipient of the *Journal* would send up the names of three paying subscribers, the *Journal* would indeed become a mighty engine for good. It would then be independent, free from pecuniary embarrassments, and its facilities enhanced; and while the present recipients of the *Journal* would be doubly paid, myriads who are now cold in the work of medical progression, would be warmed and comforted by its genial flames.

And is there one now in receipt of the *Journal*, who can not, in the circumference of his influence, obtain three responsible subscribers? Not one.

Brethren, say I will, and the work will soon be done. I would not do without the *Journal* for three times the subscription price. 'T is here I commune with those in the profession whose ripe experience and profound research, have placed on high in the world

of science. Here, the concentrated knowledge and experience of the profession may be found, in all that pertains to the useful in practice.

In the natural world, emanations from the father of waters, fill the atmosphere with the elements of rain, which, condensing, gravitate to the earth, and forms the gentle rivulets; and these rolling on in unassuming grandeur, through lawn and vale, congregate and form the mighty river, which, in imposing majesty, returns to the great fountain head, to be again resolved into vapor. In the world of science, the college is the great source from whence emanate knowledge well arranged, and like genial showers, shed its benign influence upon all classes of men. Devotees of medical science go forth from this fountain, panoplied for the conflict with contagion, and like the rivulets, though silent, are ever busy and useful in their sphere; and were these to send up their influence and experience, and all find a lodgment in the *Journal*, what an emanation of the useful and interesting, would re-ascend from the great fountain head, to bless and happify our race!

CURABILITY OF MEMBRANEOUS CROUP.

BY J. M. ALDRICH, M. D., MASS.

SOME opinions advanced by 'W.' in the January No. of the *Journal* on croup, will hardly be assented to by many physicians of the New School. 'W.' arrives at the conclusion that 'Membraneous Croup proves fatal in a majority of cases—almost as fatal as it is frequent in occurrence.' If he means to convey the idea that the proper application of known remedies fail, in a majority of cases, to cure Membraneous Croup, I think he is mistaken. That those remedies frequently do fail, in the hands of those who have not entire confidence in their innocuous and curative properties, and of course somewhat timid and vacillating in their exhibition, is very probable. But prescribed by those whose only limit to quantity is proportioned to the relief afforded, I believe the results contradict the opinions above quoted.

The great efficacy of that much abused plant, Lobelia, in the cure of Croup, is not sufficiently appreciated. Notwithstanding

all the grave and nonsensical assertions about its dangerous character, requiring great caution in its administration, etc., I never hesitate to prescribe in such doses, and to continue it for as long a time, as the severity of the case demands; and unless there has been an extreme fault in my diagnosis, I have good reason to believe that it will—combined with other proper remedies—cure a very large majority of cases of Membraneous Croup, if the treatment be commenced at a proper period of the disease. It is not difficult to perceive how it may fail in the hands of those who are suspicious of its character, and of course, hesitate about its continuous and copious exhibition; or who fail to persevere in its use, on account of the apparent severity of the treatment. Under such circumstances, the little patient finds no permanent relief, and finally, succumbs to one of the most distressing maladies which afflict the race.

Properly treated, I think Croup may be considered a curable disease, as much as Pneumonia, or acute Bronchitis; though, unlike them, it is perhaps, seldom removed, if severe, by the unaided effects of the vital energies. Physicians who suppose that the object to be attained in the exhibition of Lobelia, is merely thorough emesis, and cease administering it when that is effected, will certainly be disappointed. It must be continued until there is a full relaxation of the muscular system. Frequently, this can not be effected by causing it to be swallowed, for, after a time, the stomach may reject it immediately. In such cases, a stimulating enema should be given, to be followed soon after its discharge, by one of Lobelia, and efforts made to retain it a few minutes, which will frequently produce the desired results. If perseverance in the same direction is ever a proper quality to be exhibited by the physician, it is eminently so in administering Lobelia in Croup; and such a course, with the use of other proper remedies, will, almost invariably, be crowned with the desired success, whenever the patient is placed under its influence in the early stage of the disease.

But when the disease has been allowed to continue until the false membrane has become extensive and hardened, and the vital energies impaired, it is difficult to cure; though even then, if the pulse continue firm, and the blood is properly circulated, the case should not be regarded as entirely hopeless. In these pro-

tracted cases, I have seen long pieces of hardened membrane ejected, causing, in some cases, merely temporary relief; in others immediate abatement of the croupy symptoms, and a speedy restoration to usual health.

ALSIDIUM BLODGETTII IN CONSUMPTION AND SCROFULOUS DISEASES.—By BENJAMIN PALMER, M. D., Pittsfield, Mass.

I wish to direct the attention of the medical profession to a marine plant discovered by Dr. A. E. RUE, on the coast of Australia. Dr. R. is very confident that he has discovered some very valuable medicinal properties in this plant, and states, in the most positive terms, that it is a specific in consumption and scrofulous diseases.

I have every confidence in Dr. RUE as not being disposed to speculate on the materia medica, or attract attention by new and fashionable therapeutic agents; and through his kindness I have been furnished at different times with the medicine as prepared and used by him, and also a specimen of the plant. Upon examination I find the same plant was originally discovered by Dr. BLODGETT, and is accurately and minutely described and classified by Prof. WM. H. HARVEY, of Dublin University, in his classification of Algæ. The following is his description of it: "Alsidium Blodgettii—frond subcompressed below, terete above, decompound pinnate; pinnæ alternate, patent, close, virgate, the lowest very long, set with short setaceous, spinous-toothed, alternate, distichous ramuli; upper branches short and sub-simple; conceptacles pedicellate, inflated, urceolate, variously placed on the ramuli."

I have used this medicine with the most gratifying results in many cases in my own practice, where there was every sign of *tubercular deposition*, some of which were in quite an advanced stage; yet not satisfied with my own experience, I placed it in the hands of a few medical friends, who were equally well pleased with its success in these diseases. From what I consider the duty of every medical man, I have decided to make these facts known to the profession, hoping that any additional facts pertaining to the history or medicinal properties of this plant will be reported.—*N. Y. Med. Times.*

TREATMENT OF NÆVUS. (JOHN COLVAN, in *Dublin Medical Press*.)—I read lately a discussion in the *Medical Press* concerning various modes of treating nævi of different parts; I beg to say that a plan adopted and used at the county infirmary here, several years ago, has proved so successful, and is attended with so little trouble, as to supersede either excision, ligature, or indeed almost any other plan. The plan I allude to is, to touch the surface of the nævus with a pencil of the kali pur. c. calce, which generally causes a slight effusion of dark grumous blood; the part is then covered with some pieces of dry lint previously ready, and, if necessary, gentle pressure applied for a short time; this, however, is seldom necessary. In a few days, the part touched sloughs off, and it is again gently touched in the same way, until all the unnatural part is removed, when the ulcer is healed by a little simple ointment. This mode is equally efficacious in the case of solitary nævus, or when they are gregarious, as sometimes happens. There was a child in the infirmary lately, with a nævus occupying the lower lip, and spreading to the gum; I treated it as stated, and it left nearly quite well in a fortnight or so.—*Nashville Journal of Medicine*.

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OF ONE DOLLAR.—James R. Bell, O.; R. J. Bowen, Ill.; H. S. Plummer, O.; S. M. Gregory, Ill.; S. W. Shephard, O.; J. S. Jones, N. Y.; Wm. N. Johnston, Ill.; G. W. Clark, O.; Lyman A. Webster, Mich.; C. H. Hitchcock, O.; J. C. Hale, Me.; F. D. Cass, Ill.; A. S. Douglass, N. Y.; C. G. Polk, Del.; S. Jones, O.; A. F. Crum, S. C.; W. T. C. Baylor, M. D. Ind; S. Lindsey, Ky.; John Childs, Ind.; D. J. Saunders, Ky.; M. Keith, O.; Ira N. Mendenhall, Ind.; S. Eckis, Ill.; A. Malone, Ill.; J. P. Williams, Ga.; E. Henby, B. F. Witt, J. R. Green, Elias Shilling, O.; R. M. Corbin, Ind.; D. B. Swallow, Iowa; Hayes C. Coates, O.; S. H. Bloom, Pa.; S. Jolly, Ill.; N. J. Norris, O.; R. J. Gwaltney, O.; Wm. Jones, O.; F. C. Powell, O.; G. W. Champ, Ind.; W. R. Waddle, Thos. Plumbe, Ill.; J. W. Hawkins, Mo.; W. P. Bailey, Ind. R. F. Clover, O.

OF FIFTY CENTS.—J. W. Crippin, O.

T H E

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LECTURE TO THE MEDICAL CLASS.

FEBRUARY 18. 1857.

BY PROF. E. H. STOCKWELL.

IN all the departments of life, supply is regulated by demand.—It is so with corn, iron, and thought. This is a rule for the Medical Student, as well as for the collier.

The means required by domestic life, are, necessities, comforts and luxuries. The first are positive. They have to be furnished. The second and third are very convenient. They give great satisfaction, but their demand is not inexorable. The demand for necessities is always carried to its maximum degree. It can not be augmented; no art can stimulate it; it is regulated by instinct; and that is as sure and positive as gravity. But it is otherwise with the demand for comforts and luxuries. Their demand is never superlative. Art of the consumer and manufacturer, can always augment it. They have not nature for their regulator, but the capricious senses, fickle pleasure, and impetuous appetite.

So in the Medical life. It may be said to have its necessities, comforts, and luxuries. Man becomes ill. Disease springs up in the blood and flesh. Helplessness follows, aid is required. A physician is in demand, positively demanded; the Doctor then is a necessity. Community will have him. The rage of a fever, in the high or low, alike make the demand. Not only is the man of drugs positively required, but in addition, he must either know or pretend

to know, something about his profession. A man then with the prefix of Dr. with knowledge or the show of it, is a necessary demand. This need by the people is fully realized. We can not augment it. Pain, and weakness, and the gaze of death have made it; it is not artificial.

If this is a necessity, what are the comforts and luxuries of a medical life? They are the true characteristics of a physician. They are substances; instead of show. They are a profound knowledge of the science of medicine, and a ready familiarity with the art of it; medical independence; medical toleration; a philosophical aim; a bold spirit of progress; a self-sovereignty; a deep conviction of the importance of toleration; habits of reflection; broad and manly inferences; a faithful record of practical experience; the practice of pertinent, philosophical clinical remarks to those interested; qualification for public writing and speaking; readiness and explicitness in medical testimony; the interest of patient subordinate to no other interest; a susceptibility to the stimulus of demand, and an insatiate thirst joined with an indomitable energy, for the facts and principles, in the yet undeveloped and unexplored departments of the science of life. These are the comforts and the luxuries of a medical career.

At the present day, cholera demands a physician, but it does not call for the learned, and philosophical physician. Hence the first is the necessary thing, and the second the luxurious one.

In the social life, the comforts and luxuries are mere collaterals, but not so in the medical sphere. In the former, instinct is the selector of the article required; but in the latter, it is a blind faith that calls for, and chooses the doctor. In one instance the work is well done, and can not be improved, while in the other it is generally poorly done, and should be much improved. In one instance the necessary thing is just what is required, but in the other, it is but the shadow of the thing required. And the supply is like the demand.

The fact then has to be announced, that the demand among those who are sick, for a physician, is not so much for the one who is the most profound and real, as for the one of show, and sham and pretension.

The reason of this is two-fold. First, a want of discrimination, and a ready confidence on the part of the people. Second,

a manhood on the part of the philosopher, raises him above the huckstering spirit of the pretender. And if money is the object of the medical student, independent of the means used, then, if he would be eminently successful, let him study human nature most, and medical science least.

But if he has an ambition to rise above obscurity, if he feels the responsibility of free-agency, if he believes God to be a reality and not a myth, if he loves truth for itself, if he would have a reputation based on character, if he believes the mission of the physician is an honorable, noble, and scientific one, then he must pursue a different course—then he must eschew sham and pretension as he would falsehood and poison.

If demand regulates supply, if the people are more particular about the exterior of the physician, and, if the pretender is often an injury rather than a good, how can the genuine physician compete with the counterfeit, and how can the demand for the illusory, be supplanted by a demand for the real?

These are very important questions. Humanity, the profession, science, and every true physician, has an interest in them.

It has been announced that the demand for the comforts and luxuries of life can be stimulated by the consumer and manufacturer. If so, then as a consequence, the supply will be increased. If there was in the community no demand for the quack, he could not exist. His huckstering would immediately cease.—And if there was an urgent demand for highly qualified physicians in the community, a supply would be forth-coming. Then would students linger with the scalpel, the crucible, diagram, and lecture, until organic science had yielded to their entreaties, her very residuum.

Because things are as they are, the wise man will not complain. Instead, with courage, hope, and fortitude, will he work to change the bad to good—the wrong to the right.

The true physician has two potent motives for a change in the quality of the demand among the people for physicians.—The first reason is a humane one. The people will gain by it. Their lives will be lengthened, and better preserved by it. Their diseases will be less fatal. Their ills will be diminished. Homes would be safer. The abode of affection would be less subject to the ravages of death. Genius would have a surer indemnity, and

weakness would have a stronger ally. The second reason is a selfish one, and yet there is an honorableness in the selfishness. In proportion to the demand upon man for knowledge, in that proportion, if he has an ambition to be equal to his position and place, will he put forth efforts to supply the demand.

There is, no doubt, an original affinity between the human mind and the facts and realities of the universe. And occasionally, we notice a mind obeying this affinity—such a tendency, independent of collateral circumstances, and following this bent through life with zeal, boldness, and success. Such are the stars of the profession. They are the noble sons of our order. They are the medical devotees. They are orbs whose light never can become dim. They live with all of us, and are upon the tongues of all. But they are not numerous. This noble band has never been, at any one time, large. They lift themselves above men as the Andes do above hills. The majority of men that distinguish themselves, are learned, scientific, and practical, from demand. Why does a student learn faster at school, than at home? Why do you progress faster here than elsewhere? Because, to a very great extent, of the Interrogation. You know that you are under a demand to know all that is said. And this is a spur.—This is a whip to an ambitious, sensitive mind.

If the patrons of the physician know anything of organic science, he must know more. It acts upon him as a stimulant for a larger amount. If he is called to the witness' stand, the works on medical jurisprudence will be first carefully considered. If authority compels him to make a report of all cases, then will he be rigid in diagnosis and rational in prescriptions. If he writes for the public, authorities will be critically examined.—If he lectures, his theme will be, prior to it, thoroughly digested. If he belongs to a medical society, the pride of equality, if not of superiority, will urge him to research and knowledge.

The non-professional man can never become his own physician, any more than he can become his own watchmaker. Diffuse medical knowledge to the utmost, and the interests of the true physician will not be injured. Civilized society can not exist without division of labor. No man can become an expert in more than one art. The Jack at all trades no one has confidence in. But the man of one trade, faithfully, devotedly, and perse-

veringly followed, commands respect, reputation, and patronage. This applies to physicians with all the force that it does to engineers.

Those of you who have an ambition above the mere title of the physician, who have a desire to ascend as far as possible the shaft of science, and who desire to practice with the greatest satisfaction and the least dissatisfaction, must place yourselves in a position that furnishes an internal and external stimulus. To advance rapidly, you must have an unconquerable love of organic science for its own sake ; you must from choice, from mental bias, from interior attraction, live through life among blood, flesh, and thoughts ; you must have a pride in being accurate in your profession ; you must maintain from knowledge, that medicine is not merely an art, but also, a science ; deep and broad, you must cherish its facts, realities, and laws, and claim, at all times, that medicine is something besides phenomena and experience—besides the mere coming and going—that it has a firm basis in science and reality.

Besides the spiritual attachment for organic science—this interior proclivity toward principle and substance—the student should either place himself among those circumstances, or make the circumstances, that will quicken his observation, stimulate his reflection, illumine his consciousness, refine his taste, augment his energy, and enoble his speech. Every extrinsic circumstance, as far as possible, should be to the student's mind, what rays of the sun are to the young plant.

There is no danger at all of him who is near enough to truth to become fond of it. Then such a person is instantly regenerated. A new birth follows. He experiences a philosophical baptism. His carnal nature disappears under the transmuting presence of pure truth. And it matters not where such a soul is.—After that, he can not return to mere policy and phenomena. An immense chasm has been passed. A higher world has been reached. Whether colleges, teachers and books, are near or distant, cheap or costly, within reach or out of reach, he will never leave substance for shadow, reality for phantom. His career is onward. The subjects of a college course will not limit his thought. Nor will the years of a college training, limit his years of training for wisdom and immortality. Through life he

will be the earliest and the latest student. The labor of thought is his pastime. Mental ascension is his pleasure. And an eternal career after truth is his most cherished hope.

But with the second best student of the profession—the one that is lacking in the spontaneous zeal and affection for the infinite and the absolute, for their own sake, but is susceptible to the excitation of demand—of outside pressure, there is some danger. He is not dyed in the wool. His conversion is not thorough. Stimulants must be applied, or he will backslide. He needs help. He depends upon the wine of demand. He needs the prying inquisitiveness of students to prevent rustiness. He needs at the close of every sentence read, the interrogatory of a firm master, What have you read? He should talk and act with critics. Under the lash of these surroundings such a mind will put forth vigorous and protracted effort for a supply to meet pressing demand. And in time, a thorough conversion to science will follow from such outside influences.

But the third class—those that are, seemingly, totally depraved—those who know nothing of truth, nor of the shame from pretension, nor of compunction from idleness, who are the birds of prey in our old and noble order, who are the eagles and hawks, sailing in the livery of the good Samaritan, for an opportunity to rifle the pockets of innocence, simplicity, and honesty—of the sick, deformed, and unfortunate—are not only in danger, but are dangerous themselves, and are probably beyond the reach of counsel, and also of censure. They disgrace us. They injure our profession. Yet they are in our midst. And we can not excise them. For they flourish. And this prosperity is because of patronage—of demand. They get employment. Nothing can remove them but no demand for their sham,—but intelligence on the part of the people.

At this point, and in this connection, the duty of the college, may be announced. The Teacher should not find fault with the facts of the profession. Humanity is as it is. And so of the profession. He must take them as they are, and improve them if possible. Monopolies lead to injustice on one hand and tyranny on the other. Men should be free. No man should carry on his back his fellow. Down with special privileges. They are at war with the inherent principles of man. Hence should

the practice of medicine, and the study of it, and the teaching of it, be open to all. They should be unfenced; make a great common of them, and if they have cultivators, let them, be free-men. Not dominators, nor subservients. If a man can get employment as a drug dealer, give him a chance, whatever his ism. Those who employ the physician should be the judge of his capacities and virtues; not *I*, nor *you*, nor societies, nor would-be wise men. Let that be regulated by the collision of mind, by competition, by the intelligence of communities.

Some seem to believe that all the pretension and emptiness in medicine, are attributable to the easy standard of graduation.—This is an error.

The Professor should clearly announce to the students that medicine has a science and an art; that the rules for the regulation of the latter are drawn from the former, and that a profound acquaintance with the first, is requisite, in order to obtain the rules for the careful guidance of the second. And that this amount is not acquired in a moon, nor a year, nor a decade—Also, that the art is imparted with greater difficulty than the science. In fact, that skill can not be taught.

A Diploma is but the evidence of a good commencement. It asserts that the tyro started out with a cloudless sky, a smooth sea, and a fair wind. It tells the story of its bearer, only three years. It asserts of him fair attainments for the time spent—also the tacit hope of those who granted it, that he will by proper effort become an honor to the profession, and a blessing to his race. The diploma is no evidence of what the man will be.—It is not prospective in its tale, but retrospective.

A corps of teachers can not compel the attendance of students. Nor can they give him the love of truth; nor the susceptibility that will respond to incitants. Such are intrinsic. They are not put on. They are born. If the scholar's mind does not thirst for science, like the dry earth for rain; if he has not the pride of an equal standing among his fellows; if his soul does not wince under inattention and idleness, the teacher may lecture until the seasons cease to chase each other, and not a genuine scholar will be the result.

The teacher can present incitants to action; he can present the facts, the principles, and the laws of science; that is his

business. He is censurable if he does not. But that is not all that has to be done to make worthy physicians. In addition there must be the live student—the receptive, the reflective, and the expressive mind. There is a work for the student as well as for the professor. In fact, the student has the major labor to perform. For it is much easier to impart an idea, than it is to acquire it.

The sick man gives rise to the physician; the physician causes the teacher; and the teacher underlies the philosopher. They all construct a chain, one link of which reaches up to the Infinite, while the other—the popular one, reaches down to the mere phenomena of the finite.

The philosopher should be true to his God; the professor should be true to the philosopher; the physician should be true to the teacher; and the patient should be true to the physician.

While this looks systematic, plausible, and very satisfactory, do not, for your medical life—for your manhood, forget that self-sovereignty is innate, inherent, inalienable. This is a sacred right. It is the richest possession of the soul. Every student, physician, teacher, philosopher, and patient, should rigidly guard this regal characteristic. Freemen are wanted, and they only, in medicine. Of them we want a great increase. Students should never relinquish their Americanism. Let neither preceptor, nor teacher, nor author, trample upon it. Treat him as the direst enemy who would interfere with it. It is their birthright—the insignia of their royal blood.

If this is the proper position to take, how can the standard of qualification be elevated? Never, I say, by compulsion, nor by legal means, nor by denunciation, but by inducement, persuasion, invitation, attraction and stimulation.

Our science and art are too large for acquisition, by a single life, however extended. No man can ever become a perfect practitioner in any department of practice, much less in all departments. And no man, with common sense, is so ignorant as to fail to do something well, for a given case of disease.—Some of the wants of the ill may be met properly by any one, while there are others, that require superhuman power to meet correctly and effectively. Some of our needs, when sick, are self-evident; others are beyond the reach of human ken.

Thus are we situated, and thus must we continue. We are all—old and young, wise and foolish, learned and unlearned, more or less imperfect. All do some harm. All do some good. At best, the sight of one is but some clearer than that of others.—Hence to all should we be charitable. To all should we be tolerant. Between the best and the poorest, there is only the difference of degree. Such being the fact, our duty is to do as little harm, and as much good as possible. Knowledge enhances the latter, and curtails the former.

Again, insight into truth, is not wholly wanting in any one.—This immortal capacity is somewhat in all. Though it predominates in a few. And in proportion to this insight, does the mind possess the proclivity, spontaneously, towards the true and the good. Susceptibility to outward demand is also possessed, in some degree, by high and low, the obscure and notorious. Patient and student act upon the physician; physician, upon teacher; teacher, upon the discoverer. They are connected by correlatives. Though streams of influence run from the mountain peaks of the profession, to its distant valleys, still from the remote purlieu run silent currents up the mountain shaft, to the very apex of the beetling crag, and towering spire.

All require the stimulus of spontaneity, and that of demand.—Together they will lift the soul into the region of enduring fame. One comes from the Infinite, the other comes by the intelligence of the finite. In all, both require augmentation. They can not become excessive. They are to the soul, what the diverging cables are to the mast. More, they not only steady it, but they warm and animate it. And here we can judge of the good done by the diffusion of medical knowledge. The physician is a grade above his patrons. So true is this, that the information of the latter is a very true index to that of the former. He is compelled to be somewhat in advance of his patrons. He can not obtain their practice without; and far beyond this point he does not go.

If medicine is somewhat popularized, the people are thereby rendered capable of reflecting back upon the profession a healthier influence. The physician by it is taxed to supply a higher standard of qualification. Every lecture delivered to the people; every journal sent among them; every book on organic science

introduced into the school and the academy ; every clinical lecture delivered to the friends of the sick ; every scientific fact announced in conversation by the physician with the people ; every work published on the art of health, is an efficient means, silently working, for the elevation of the standard of professional attainments. So also is the multiplication of medical colleges, medical journals, and medical students. Too many students can not attend medical colleges. Even if they should comprise the whole community. In doing so, the knowledge obtained, that can be used for the preservation of their own health, will far more than remunerate them for the time and money spent, even if they should not practice medicine. And especially would they be paid, in the fact that quackery then would hide its brazen face, and all physicians would have to be accurate and profound. Every step this way sets up a light that exposes the ignorance, sham, prejudice, error, fanaticism, superstition, and bigotry of physicians and professors. By these means, Hercules is set to work at cleaning the Augean stables. In a scientific sense, every man in the profession is benefited by the knowledge in the community on medical subjects approaching his. He will feel an outside pressure for a greater supply of organic science that he can not resist and remain safe. This is a sure way to improve the profession.

Then, if the student desires to make all possible progress in his medical career, make outside circumstances come to his aid. Then make the demand of the people for scientific attainments superior to the stock in trade by the charlatan, bigot, and sectarian. Then make the tastes, the thoughts, and the wishes of the people so many urging inducements to study, progress, and acquisition of truth.

For the healthfulness of your own mind, for your character, for the good of the profession, do not teach the people falsely, do not give them "serpents for fishes," do not for the sake of covering up your own ignorance, pervert their minds, for if you do, you will lose the second most important incitant, demanded by the mind—the lash of necessity—the action that is equal to the occasion.

As an additional whetstone to the mind, the graduate, through life, will find the College Halls most genial and sanative. The practice that keeps him out of them, is a most mischievous one.

Though the Diploma is a passport to medical men, societies, and colleges, yet it is not a living fountain of knowledge; but instead, without toil, and that continuous, a standing rebuke and scourge. Let him cherish, then far more what is in his head, and what he will put there, than what is on his parchment. In saying this, I do not underrate the Diploma. It is the evidence to the world, that you have medical acquirements. It goes before you, like a hostess, introducing you to the profession, wherever you may go.

To be more specific. To keep what you have here acquired, refer to it often. Memory is like iron, if not used, it will oxidize. Repetition is the secret in memory. The dust on your works, on science, will tell the tale of your research. Remember that the pains you take with an inquisitive student, is as much for your good, as for his. He will be required to keep rust out of you recollection. A dictionary will always help you over the unknown word. Till that is overcome, cease reading. Commence the second sentence, not until you understand the first. The best school in the practical life of the physician is the recording with critical accuracy cases in practice. It is very self-instructive. It is beyond price. It will make a ready and correct medical scholar. It is full of demand, and supply grows richer from day to day.

The progress of the day as announced through journals, and other publications, is, to one who will respond to it, a very sanative stimulant. It will refresh the memory and increase its facts, and keep at an unhurtful distance, that miserable brood—stuff, show, hollowness, brass, fanaticism, hunkerism and bigotry. The interest of patients, subordinate to no other, is to the mind, what wine is to the stomach. It is a wholesome rod; under it, no thought is too protracted, no research too extensive, no action too laborious, no punctuality too faithful. It is to one a perpetual sunshine. Its beams are full of light and warmth.

To be philosophical in prescription, there must be anterior to it—not a diagnosis for display—not an examination for wise airs, verbose speech, and swelling self-importance—but a careful observation that will detect every step taken by the demon Disease; one that will positively trace him to his den, for the sake of bearding, and throttling him.

What is worth doing at all, is worth well doing. Never be in a hurry. It breeds confusion, error, waste, and ill-luck. But do all things with dispatch. It begets circumspection, clearness, purpose, and execution. The house fly is the type of one, and the bee that of the other.

Avoid the illusion of ism, all pent up Uticas, all coops, all brands upon your fair foreheads, and all slits in your ears.

Never forget your tutelary GOD. It is Americanism. It is Independence; it is a right to make the utmost out of your immortal minds. It is the bald Eagle and the Stars and Stripes. Be ever true to it. Seek the jugulars of him who would pluck a single feather from this noble bird. In your love and devotion, let it stand next to the real GOD. To whom, ever render the profoundest meekness and humility. And while no man with impunity should ride upon your back, grant to all others, the same freedom, and the same authority to bring doomday upon the tyrant.

VERATRUM VIRIDE.

BY W. C. NORWOOD, M. D., COKESBURY, S. C.

THE first power or property we shall notice is that it is acrid, producing a peculiar warm and biting sensation in the mouth and fauces after chewing. It is a very active sternutatory, exciting rapid and almost continued sneezing when the least quantity of the powdered root is applied to the nostrils. It is also rubefacient, producing burning and redness when the tincture is applied to the surface, thereby often relieving pain. The above named are prominent of the kind, but not important like the following.

It is the most certain and valuable emetic. The vomiting being full and free, with frequently little or no retching. The liver is excited and bile is freely thrown off during the second or third effort at vomiting. As an emetic it is valuable in croup, asthma, whooping cough, scarlet fever, etc. It is the most efficient and certain diaphoretic, acting from the mere softening and relaxation of the skin, to the most free and profuse perspiration.

Indicated in all febrile and inflammatory cases where the surface is hot and dry. It is adenagic, alterative, or deobstruent, equaling, if not surpassing, iodine and mercury. This property and power renders it peculiarly valuable in scirrhus, cancer, and glandular effections generally. It is expectorant—so much so that we rely almost alone on it, and no other. It is nervine, not narcotic. We could never perceive any narcotic effects in our patients, or ourselves, and we have taken it more than twenty times in minimum and emetic doses. It is not cathartic by any means. It promotes appetite when given in very small portions. But the greatest and most valuable power, and that which so emphatically distinguishes it from all other agents or remedies, is its power and ability to control the action of the heart and arteries. This it effects with such certainty, clearness, and extent as to strike with perfect astonishment all who have witnessed this wonderful effect. Neither is it in the power of man to describe it so as to enable any one to form any idea of the result who has never witnessed its effects. Indeed, no man can have any conception of the effect who has not witnessed the fact. Who can fail to appreciate the usefulness and power of an agent or remedy capable, in from six to twenty hours, of reducing a pulse from 130 or 140 down to from 50 to 60 and 70 beats per minute, rendering the hot and dry skin cool and moist. There are one or two effects we will notice in this place. In hysterical and very excitable patients it produces a strangling and suffocating sensation during the act of vomiting, resembling globus hystericus, or even where there is much nausea or retching. It often excites great coolness of the surface, often icy coldness. These last symptoms, in connection with the above, often alarms the friends, by-standers, patient, and physicians, who are unacquainted with the occurrence of such effects.

When the nausea, vomiting, and paleness, and coolness are in excess, the surface is often bathed in perspiration, and the pulse is often reduced to 60 beats per minute, and occasionally not exceeding 35 beats to 50 per minute. Should these effects be in excess, the quantity of the tincture should be reduced, and one or two portions of syrup of strong alcoholic tincture of ginger will banish every unpleasant symptom in less than thirty minutes. The vomiting is often rapid, and almost continuous. We have

known patients to vomit from forty to fifty times with perfect impunity, and all of those symptoms, however urgent, removed in thirty minutes or less, by the above agent. Indeed, the one set of remedies is as efficient and certain of affording relief as the other is of producing the apparently unpleasant effects. We rely on it as the remedy in typhoid fever, and administer it with every assurance of success. We put the patient on the free use of it at once, and press it till every symptom is controlled or arrested. Our plan is to reduce the pulse to between 55 and 75 beats, and keep it at the point desired night and day. In severe cases it should be reduced, at least to the natural standard, if not below it. By this kind of reduction the febrile and inflammatory symptoms vanish, and the patient is kept quiet, and tranquil, and comfortable. A great many fail of success by not reducing the number of the pulsations sufficiently, or by suspending the use of the remedy before the disease is fully routed out. It is out of the question for febrile and inflammatory action to exist and continue their ravages for any great length of time when the pulse is kept at 60 or 65 beats, or even less. We have kept it, for days, at from 42 to 45, and 50, with success. In typhoid fever, where there is yellow fur on the tongue, and bitterish taste in the mouth, we push the remedy to vomiting. In many cases, after the pulse is reduced, and the quantity of the tincture lessened, we find a tendency in the afternoon for the pulse to quicken a few beats, and the skin to be rather dry, and a more frequent call for water. We have made it a point to increase the dose one or two drops for a few evenings so as to anticipate and prevent this effort at an exacerbation. In Pneumonitis we consider it as much of a specific as quinine is for intermittent fever. When the case is severe we give the patient a full portion, six or eight drops, and increase it till free emesis takes place. You will then find the pulse reduced, febrile symptoms subdued, and pain relieved. There is a variety of pneumonia in which there is yellow fur on the tongue, bitterish taste in the mouth, pain under the scapula or clavicle, the matter expectorated yellow and tenacious, or adhering closely to the vessel, and resembling melted sulphur. In this sort of cases hepatics should be given, or your patient will convalesce very slowly, and the recovery will be imperfect. These cases are very liable to be troubled with hiccough

when not properly treated. We have used it with unfailing success in orchitis or metastasis to the testicle in mumps, not failing to relieve the pain and febrile symptoms in less than fifteen hours. We have used it with the most favorable results in asthma, whooping cough, croup, measles, and scarlet fever. In scarlet fever we use it in combination with diuretics and find it superior to all other remedies we have ever tried. We find it to rob puerperal fever of its terrors, and to save from death many that could not be relieved by any other remedies. Why should it not succeed in this fearful disease? How is it possible for inflammation to keep up and advance when the action of the heart and arteries are kept at the natural standard if not below? In these fearful, alarming, and rapid diseases, the pulse should be kept as far below the natural standard, as possible, and the patient be kept perfectly quiet and still. But farther inflammation has its seat in the capillary system. Where the pulse is kept slow, the surface cool and pale, the capillaries become emptied and the blood flows quietly through the large vessels, or mere canals of the system. The capillaries are the seat of all morbid and vitiated actions and sensations, and by holding the *heart* in abeyance, the chief organ and instrument of action in the vascular system, you have the destiny of your patient in your own hands. We should attempt the cure of yellow fever by the same method. We feel confident, that by using the V. Veride, or Green Hellebore freely and perseveringly the first twenty-four hours, that this fearful scourge would fail for want of fuel. We would keep the vascular system, the heart in particular, curbed and under full check, and prevent that rapid expenditure of vital power and energy resulting from rapid and violent arterial action. In convulsions accompanied with febrile action, we rely on it in treatment of children. In acute chorea, so soon as vomiting was excited we found the symptoms readily yield, and by continuing the tincture in less dose for some days after the cures were effected. Drs. TERRY, of Georgetown, Geo., and SHEPHERD, of Eufaula, Alabama, have confirmed our own experience by their success. Indeed, we should use it in all febrile and inflammatory diseases accompanied with frequent pulse, and hot and dry skin. We have used it with success in a case of inveterate dysmenorrhea which had resisted other remedies for years. We notice a state-

ment of success in dysmenorrhoea in the *Memphis Medical Recorder*. It has been used in cancer, epilepsy, and palpitation of the heart, with great relief from suffering. In gout and rheumatism, it promises much from the limited trial that has been made. I should, by no means, omit to state its great value in the treatment of mania.

DIRECTIONS FOR USING OUR TINCTURE.—Take simple Syrup of Squills, add the Tincture, and mix drop for drop, or ounce for ounce, shake well. Of this mixture, to an Adult Male begin with from four to six drops and increase from one to two drops every portion given till the pulse is reduced, or nausea or vomiting excited. Then reduce the dose from two to four drops, according as the reduction took place without or with nausea or vomiting. If you wish to avoid nausea or vomiting, begin with four drops and increase but one drop every portion given till the excitement is controlled. In Females, begin with from three to five drops, and increase one or two drops every portion given till the effects desired are obtained, then reduce the quantity from two to four drops if necessary. If you wish in their case to avoid vomiting and nausea begin with three drops and increase but one every portion given till the end desired is reached, then reduce the quantity. For Children mix two drops of simple Syrup of Squills with one drop of the Tincture, or two ounces with one. From one to two years old begin with two or three drops and increase one every portion given till you succeed in reducing the heart's action, or nausea or vomiting is excited, then reduce the quantity from one to four drops as may be required. By beginning with two drops and increasing but one drop every portion given, nausea and vomiting may be avoided. We give a portion regularly every three hours in a little sweetened water. If nausea or vomiting should occur or be in excess, Syrup of Morphine and Tincture of Ginger will relieve every symptom. Sometimes the vomiting is nearly continuous. Where this is the case, give a teaspoonful of Brandy and a few drops of Laudanum or Morphine every five minutes till the symptoms are arrested. By this method we accomplish our purpose without nauseating or vomiting one case out of twenty. In severe and rapid cases it would be right and proper to begin with a large portion and increase from one to three drops every portion given till we gained our object.

VARIOLA OR SMALL-POX.

SMALL-POX is an inflammatory contagious disease, marked by an eruption of moderately large pustules, having an umbilicated appearance, preceded by considerable constitutional excitement. It is divided into natural and inoculated, corresponding with the mode of communication, either by exposure to the variolous infection, or as it results from the insertion of the virus into some part of the system. The second division is into the distinct and confluent, according as the pustules are isolated from each other, or as one becomes commingled with and blended with another. This latter division, though important in one sense, is unimportant in another, for the reason, that the eruption is frequently confluent on one part of the body and distinct on another. The face is frequently the seat of the confluent pustules while on other portions of the body they are as frequently found distinct. There is nearly every variety of shade from the mildest form of Variola to the most intense and prostrating of the confluent.

For convenience of description, and at the same time following the course or progress of the disease as manifested to every accurate observer, it has been divided into periods enumerated as they occur in the natural development of the malady, viz. : incubation, invasion, eruption, suppuration and desiccation. The first of this division, that of incubation, includes from the date of exposure to the contagion till the morbid symptoms begin to appear, and lasts a longer or shorter period, sometimes not longer than from four to six days, in others twenty. It is marked by no appreciable symptoms indicative of deranged health. The violence of the attack is greater in proportion to the shortness of the period. In the distinct form of the malady, the invasion is usually accompanied with more or less constitutional excitement, such as rigors, depression, lassitude, pains in the limbs and back, skin hot and dry, pulse quick, headache, thirst, nausea and vomiting, and sometimes with pain in the epigastrium. These symptoms usually continue for three or four days and are accompanied with a cough, tendency to sleep and perspiration ; and it is not uncommon in children to be accompanied with drowsiness, coma, or convulsions. The tongue is dry and very red, with a pulse over a hundred beats per minute in the distinct form ; the

symptoms are always aggravated in the confluent. The lips and tongue are dry and generally covered with black sordes. About the third or fourth day the eruption usually makes its appearance, first on the face, then on the neck, arms and body which is completed usually in twenty-four hours. It is sometimes preceded by an erythematous rash, consisting of small red spots not unlike small papilla. The eruptive period is accompanied with a hot shining skin; at first all the symptoms are aggravated; but they generally subside when the eruption is completed. A period of four or five days intervenes between the first appearance of the eruption and that of suppuration, during which the small spots increase in size and become concaved or cupped in the center. A minute examination, about the second day, reveals to the eye a multitude of small pointed elevations, of a redish color with inflamed bases which are more vesicular than popular in form. They are supposed to be the result of an effusion of semi-transparent coagulable lymph, which afterwards concretes and forms a circular disk, which is adherent to the cutisverd. After the third day, the concavity in the center assumes more and more the cup-like form up to the period of suppuration. At this period, the pustules are of a light color surrounded by a light red areola. The pulse becomes full and regular; it is not uncommon to find pustules on the tongue and pharynx; there is also more or less difficulty in swallowing and sometimes a slight cough. The eruption is sometimes confluent on the face and distinct on the body, in which case; the former becomes red and swollen, having an erysipelatous appearance the cup-like depression but seldom seen. At the same time pustules of a whitish color, the central depression less complete, are found on the body. The tongue, pharynx, and eyelids also become the seat of the eruption; and a painful acute form of ophthalmia often ending in destruction of vision, supervenes. Symptoms indicative of a similar eruption in the nostrils, pharynx and trachea, are present in the form of coryza and cough.

Between the fifth and seventh days, after the appearance of the eruption, suppuration begins and terminates in from three to four days. A swelling of the integument, particularly on the face and hands, becomes quite prominent, which is attended with a renewal of the febrile symptoms. With the increase of the pus, the pustules lose their umbilicated form and assume that of a spheroid,

when they turn yellow or dark brown, and, in some cases, even black. The face is the seat of suppuration at first, which soon extends to other parts of the body; the hands and feet, on account of the thickness of the epidermis, keeps them from opening till the last. A pustule opened at maturity presents to the observer a quantity of yellow pus, and at the base of each pustule may be noticed a whitish umbilicated disc, resembling, in nearly every essential particular, a pustule prior to the commencement of suppuration. The pustules remain but a short time in a state of suppuration before they burst, which takes place in the course of a day or two, when they are followed, or replaced by dark-colored scabs or crusts. The suppurating process is usually accompanied with fever, tumefaction of the hands and face, and in some cases with ptyalism. The swelling ordinarily appears about the fifth or sixth day of the eruption, and is accompanied with the secondary fever first upon the face, particularly the eyelids, lips and nose; the eyelids remaining closed sometimes for days. The hands becoming tumified about the same time with the face, the swelling in both instances declines about the eleventh or twelfth day of the eruption, when the suppurating stage is closed. Besides other symptoms that appear in the course and progress of the stage under consideration in insulated cases, it is not an uncommon occurrence for diarrhea to set in accompanied with difficult breathing, and in some instances, coma. Desiccation commences on the face and soon covers the surface with an uninterrupted crust or scab, while on the limbs pustules are only forming. In the distinct form, pustules burst and the pus escapes and concretes into small scabs which preserve the form of the pustules. In the confluent variety, the scabs are formed on the face about the eighth, or ninth day of the disease, when the features become masked by a thick brownish incrustation, which falls off from the fifth to the fifteenth day from the date of its formation, when it is followed by a furfuraceous scaly crust which falls off and is as frequently renewed. The patient during the period emits a peculiar disagreeable odor, and the clothing is soiled by exudation of pus emanating from various parts of the body. In all cases there is more or less itching present, and in some it becomes exceedingly disagreeable from the frequent application of the nails to the parts, producing deep and painful excoriations. After the removal of the scales, deep red stains can be seen be-

neath, which disappear slowly, and as this red color disappears, the pits become more and more apparent, which usually remain during the remainder of life.

The treatment in mild cases is very simple when uncomplicated with any internal disease. A cool pure atmosphere, quietude, a mild unirritating diet, small in quantity, cooling drinks, and some gentle laxative when indicated. When, however, the fever runs high, the child restless and fretful, some mild diaphoretic may be used, unless the sedative mode of treatment be preferred, in that case small quantities of the tincture of gelsem. should be administered and repeated to fill indications or, what is thought to be still better as a cardiac sedative, is the tincture of veratrum viride which will be found a valuable substitute if not a superior preparation. Should head-ache become troublesome, pediluvium or the application of warm cataplasms to the feet; when the throat is sore and painful, mild cooling gargles; cooling lotions to the eyelids, when the pustules give rise to much irritation, are the only remedies, ordinarily required in a simple mild form of small-pox. In case the eruption is tardy in its appearance, an emetic may be administered with benefit, followed by some sudorific; and in many instances benefit well be derived from a warm or vapor bath. During and after the period of suppuration, when the patient's strength is failing, tonics are often very useful, and in some cases the direct stimulants will be indicated.

With a view to prevent the deformity that so frequently supervenes, numerous local appliances have, from time to time, been used, some with but little or no benefit, others slightly modifying the ravages of the disease. It has been recommended to rub the surface of the body roughly with a coarse cloth, or towel, soon after the eruption is completed, with what benefit the reader will have no trouble to devise. Cauterization is another, which consists of two modes: the first is by the application of caustic to each pustule separately; the second to the eruption collectively; the former method being preferable. "To succeed perfectly," says a writer, "it is necessary to touch the derm forming the base of the pustule; so that the best plan is to remove or lift up a portion of the top of the vesicle with a lance, and then to introduce into its interior the sharpened point of a stick of caustic." This operation is only successful when performed on the first or

second day of the eruption, says one, though others have met with success as late as the third or fourth, and even the sixth day. As might be expected, the cauterization is productive of much pain, though it does not increase the local inflammation when applied to a few pustules at a time. The same writer states that "when applied to the pustules seated upon the margins of the eyelids, it is almost incredible to behold how great is the diminution of the edema of those parts in a single day." It may be inferred, then, that the cauterization of individual pustules with the nitrate of silver does cause them, as well as the surrounding tumefaction, to abort, and prevents the disfiguration which the ravages of small-pox is sure to leave behind it, as a mark indicating its presence at some former period. An able writer upon dermatologia remarks, that the advantages derived from the use of nitrate of silver by some authorities "are more imaginary than real, as we have often seen this plan of treatment followed by effects the very opposite of what was expected." But says the same author, when aphthlamia supervenes, the pustules on the eyelids should always be cauterized immediately with the nitrate of silver, either in the form of solution, ointment or the solid stick.

With a view to prevent cicatrices forming on the face, one of the best modes is to open carefully each pustule, then pressing the parts gently till all the matter is removed, and by emollient fomentations applied locally prevent accumulation of scabs. Numerous plasters have been highly recommended by writers as being efficient among them may be mentioned the emplastrum devigo, sulph. ointment, and in some cases, gold leaf. Relying for information on those who have used them we are forced to the conclusion, that they do little or no good in mild cases, but may do harm in graver ones. For reports of cases, see BRAITHWAITE's Retrospect of Practical Medicine and Surgery, No. 3, 51. Later still, the tincture of iodine and collodion have been very highly recommended and in some instances extensively used.

During the past winter we have used on numerous cases almond oil lubricated on the face, over which a piece of black silk cloth, made to fit accurately the prominences and depressions, was applied, commencing on the first or second day of the eruption, and continued their use for a week, and in some instances two. The oil was applied morning and evening and the black silk mask was

worn both night and day. Up to date there is every reason to suppose from the appearance of those treated, that there will be but little if any deformity supervening. The cloth ought to be accurately fitted to the parts exposed to the rays of light, leaving openings in it for the eyes, nostrils and mouth. W.

SLEEP—ITS PHYSIOLOGICAL USE.

THAT accomplished scholar and sublime poet, DAVID, the king of ISRAEL, in one of his beautiful Psalms, recounting the mercies and gifts of GOD to his people, says, at the conclusion of one of his most elegant passages: So he giveth his *beloved sleep!*” Beautiful thought—sleep, *the* beloved gift of GOD! “GOD’S *beloved sleep!*”

That the Jews had a high estimation of the value of sleep, is evident from the reply of the disciples of our LORD to his remark about LAZARUS: “Our friend LAZARUS *sleepeth* ;” they reply, “LORD, if he *sleep* he *shall* do well.” Indeed, MENANDER, one of the Greek poets, says, *Sleep is a remedy for all disease.*”

“SHAKESPEARE, who seemed to know all that was known, and more besides, gives us the following poetical and philosophical description of sleep:

“Sleep, that knits up the raveled sleeve of care ;
The death of each day’s life—sore labor’s bath ;
Balm of hurt minds—great nature’s second course ;
Chief nourisher in life’s feast.”

Oh! what philosophic text for a didactic sermon. Can any one, save such a one as SHAKESPEARE, work out all the matter which here lies wrapped up in this little bundle? Let us essay our power what if we fail? who would not?

We remember, when we were a child, how often we have lain watching to mark when sleep would overcome us; but so stealthily has it come upon us that we never found out how, or when it came. We suppose death comes, in like manner; some time we shall know.

How wonderful it is, that in the most unlikely place, under the most inauspicious circumstances, and at the most unexpected

time, sleep comes, refreshing, renewing, exhilarating, and invigorating both the body and the mind. Nay, more, what wonders are often accomplished during sleep! Some of the finest passages of our lives have occurred during sleep.

One of the sweetest sleeps that we ever slept—enriched and beautified by the loftiest and purest visions of the soul, was on a hard, bent, rutted and hillocked straw mattress, in a close, stinking cell of a prison; whither we had been consigned on arrest for the offense of “testifying to the truth,” against a “highly respectable” and “very devout” criminal. While this worshiped sinner was in the agonies of dreadful remorse—but not repentance—we were in the ecstasies of rosy sleep and blessed visions. Never to us was sleep like that. We never *knew* the terrors of the law before, and did not *feel* them then.

Sleep is the *rest* of the *brain*, and therefore of the *mind*; for as the brain is the organ of the mind, when *that* becomes weary, the *mind* seems to be weary also. The *particles* of the brain are worn out, or rather used up, by action, and then the brain ceases to work; then the blood-vessels deposit new particles of matter and it is *renewed*. The process of renewing the brain constitutes *sleep*.

The jaded mind and body are thus both refreshed and invigorated. How the laboring man enjoys *his* sleep; how the careworn, honest, and upright judge—if in these days there be one—is refreshed and clarified by *his* sleep; how the skillful and attentive accoucher is brightened up by *his* sleep, after a night of careful toil for the benefit of his suffering; and how is poor, exhausted woman refreshed and re-nerved after her awful agonies, by “*balmy sleep*.” This brings to our mind that beautiful line of Young:

“Tired nature’s sweet restorer—balmy sleep.”

We have no doubt SHAKESPEARE would have found some better epithet than *sweet*. We have thought of a variety of epithets, but we can not single out a monosyllable to our mind, except “*kind*” or “*loved*,” and we are hardly ready to adopt either. If we were obliged to adopt some word, we should take ‘*loved*’—using the word abreviatively as “*beloved*”—after the model of DAVID. “So *you* presume to improve YOUNG! I hear some

one say. I beg your pardon—I was merely proposing to *alter* his verse.

“Sound sleep,” as it is called, or “profound sleep,” as others call it, is so like to death that it can hardly be distinguished from it. The whole process of thought and sensation are suspended; even *consciousness* as well as *conscience* sleeps. How singular that once, or more, in every twenty-four hours, we die to all around us and within us. We begin *life anew* every morning. What a fine opportunity for a *new life*. Even as the sun goes down at night, and leaves the world in darkness to repose, so does sleep come down on body and soul; as nature springs forth, refreshed and invigorated, when the sun riseth, so do our bodies and minds awake and arise when sleep holds us no longer.

The renewal of the particles of the body, especially those of the brain, restores the completeness, the power, and the comfort, of every part. The limbs that have been wearied with labor, and are sore, and the brain that has been worn out and ached with thought and care, are renewed and refreshed. Ease and comfort are the result. What bath and liniment are equal to sleep, for the weary?

How would the sorrows and miseries of the world be borne, but for sleep? How many thousands lie down at night with an aching heart, and rise in the morning with an easy one! Millions of children go to bed, supperless and sad, who sleep, and awake cheerful and gay. The cares of a single day would be sufficient to weigh us down, if we were not relieved by the obliviousness of sleep. What remedy, but sleep, is of any use to the man whose domestic comfort is destroyed, whose reputation is sullied, or whose hopes are blighted?

Food nourishes the body, by supplying it with the materials for renewal of its wasted substance. Yet digestion is not sufficient for restoration. Sleep is the second digestion, or second course in nature's table. We go to bed, wasted and worn, haggard and wan—we sleep, and awake recruited and renewed, plump and smooth. What washing and ironing does for our clothes, sleep does for our bodies.

Who is there that has not observed the fullness of the face, and the suffusedness of the eyes, from sleep? We are larger and

taller every morning after sleep, than we were when we went to bed. Every muscle and membrane is repaired and restored from the previous day's wear and waste—we are renewed.

Such being the benefits of sleep, we inquire, how can they be most surely obtained and secured? Night being the time for the repose or nature, it is of course the time for our repose. Is it not natural, nay, inevitable, to sleep when darkness surrounds us, and stillness wraps up our faculties? Who has not felt the inclination, often times irresistible, to sleep, after a full and satisfactory meal? Furthermore: who has not experienced the pressing invitation to sleep under a dull and monotonous discourse, especially a dry and musty sermon? If it be a sacrilegious offense to *sleep in church*, then is the offense committed weekly and daily, by those who are conscience-smitten at their offense.

To secure good sleep, therefore, retire as soon as night and stillness invite you—while yet the digested food of a good meal is unused by toil of body or mind—and if music is to allure you, it must be low, soft, soothing, and monotonous. The posture of the body, of course, must be horizontal, and the head low.—Early rising and good sleeping, are not compatible, except on the condition of early retiring to rest. There is an old English distich to this effect:

“Early to bed, and early to rise,
Makes a man healthy, wealthy, and wise.”

Those who do not sleep well, do not work well, either with body or mind. Fashionable people, who violate or neglect more laws of their being than even vicious or criminal persons, violate the laws of sleep, awfully. They are up late, exhausting both body and brain, long after the last meal has been taken and digested, and do not retire when the darkness and stillness invite them. Then they have no extra supply of blood for the brain, perhaps not enough for common purposes. They lie in the morning, while nature is all awake, not in sleep, but in unrelieved weariness, and try, by mental and physical stimulant, to supply the force, obtained by the poor, uncultivated laborer, by *sleep*.

(TO BE CONTINUED.)

DISTINCTIVE TESTS OF SOME OF THE VARIETIES OF ALBUMEN.—The following remarks are extracted and condensed from a valuable series of chemical tables compiled by T. J. HERAPATH, which are being published in the *Chemist*:—

All forms of albumen contain nitrogen and sulphur, are soluble in a hot solution of caustic potash, and then blacken the salts of lead; heated with a solution of subnitrate of mercury to 140 deg., they acquire a deep red color.

1st. *Albumine* is coagulated by boiling, but more readily on the addition of dilute nitric or hydrochloric acid. There are two varieties of it; the first, ovalbumine, the white of an egg, is distinguished by its coagulating with ether, and by acetic acid and heat, remaining so at all temperatures; the second, or ser-albumine (of blood serum), is not coagulated by ether, and the precipitate with acetic acid only appears on cooling the solution, and redissolves on the application of heat.

2d. *Emulsin*, obtained from the kernels of almonds, and certain species of *pyrus*, is distinguished by precipitating with ordinary phosphoric acid, whereas ordinary albumen precipitates only with the metaphosphoric acid.

3d. *Fibrin*, distinguished by its power of spontaneously coagulating.

4th. *Caseine* or *legumine*, obtained from milk, vegetable juices, the seeds of the *leguminosæ*, etc., it is distinguished from fibrin and albumen by its not coagulating either spontaneously or by heat, and by forming a pellicle, when its solution is evaporated. It is coagulated by dilute acids, which are unable to coagulate albumen.

5th. *Pepsin*, contained in the juices of the stomach. When digested with flesh, etc., at a temperature of 98 deg., it causes the flesh to become soluble in water. It is distinguished from albumen by its solution being precepitated by dilute acids, the precipitate redissolving in excess; and from caseine, by its acid solution not being precipitated by prussiate of potash.

6th. *Hæmosine*. Its aqueous solution is brownish, and on boiling, it deposits a brown sediment, readily dissolving in alkaline solutions with a brown color.—*Chemist*, No. XXIX.

ARCTIUM LAPPA AND CHIONANTHUS VIRGINICA.

IN this communication I propose making a few remarks on two valuable articles of medicine, of which, but little, if anything, is known to the profession at large. I mean the *green* leaves of *Arctium Lappa* (Burdock) and the bark of the root of the *Chionanthus Virginica* (White Ash, Grey beard etc.,) I have been in the use of the former for the last five years, and I have been using the latter for more than twenty years. They are, both of them, powerfully alterant and largely tonic. I have used the green leaf of the Burdock in but one form—that of tincture in common spirits. When the leaf is about matured, it should be gathered, bruised in a mortar, and 3 lbs. of it, with one gal. of common spirits, put into a closely covered vessel, and let stand for two or three days. Then strain off, with strong pressure, into bottles or jars, which should be tightly corked. This tinct. is *intensely* bitter. The dose, for an adult, is a tablespoonful from three to five times a day. This is the best alterative of which I have any knowledge, in Scrofula. I have used it, with complete success, in several very severe cases. It will be found an almost unfailing emmenagogue—especially in cachectic habits. Cases frequently occur, which exhibit a disposition to break out, all over, with boils. In such cases, this medicine will prove itself to be really valuable. It aids greatly the depurating process, and the use of it for a week or two, leaves the system in a relieved and healthy condition.

Further experiment, no doubt, will prove this article to be valuable in other forms of disease, but my own experience extends no further than I have stated.

I learned, some twenty-two years ago, something of the powers of the *Chionanthus*, from a very intelligent planter of Mississippi. He used it as an alterant, in all cases, where such a medicine was indicated—particularly in Syphilis, both in its primary and secondary forms. I soon commenced experimenting with it, and since then, I have rarely been without it. It is a shrub, from eight to twenty feet in height, growing in many portions of the south, in low, rich and rather moist places. I have used it, only in the forms of syrup and tincture. I make a simple and a compound syrup. The former is made of the *Chionanthus*,

alone; the latter of the *Chionanthus* and the *Podophyllum Peltatum* aa. In Syphilis, the last named syrup is given, in a sufficient quantity, to act as a brisk (but not excessive) cathartic, once in eight or ten days; and, if necessary, at any time, in aperient doses, merely to keep the bowels open. At the same time, the simple syrup is given three times a day, in doses varying from a tablespoonful to a small, wineglassful—according to circumstances, and as it appears to affect the patient. During the use of these syrups, a mild vapor bath, daily, will greatly facilitate a cure. In chronic disease of the liver, I have found these syrups extremely useful;—used much in the same manner as in Syphilis.

In Seucorrhæa, others, as well as myself, have found a saturated tinct. (in common spirits) a very effective medicine.—Given in tablespoonful doses, three or four times a day, combined with proper local treatment, and, the bowels kept open with the compound syrups, I have never known to fail.

I forgot to observe, when speaking of the *A. Lappa*, that a saturated tincture of equal parts of its *green* leaves and the *green* leaves of the *Eup. Perfoliatum* (Boneset) or one eighth part of the latter, dried, is the best alterative tonic I have ever used in chronic chills. Any practitioner, that will give it a fair trial, will not willingly (afterward) dispense with its use.

Having, now, introduced these two articles to the notice of the profession, it is to be hoped they will give them a thorough trial, and publish to the world the result of their experience. I can freely assure all, that, though powerful in action, they are as innocuous as the simple Sage or Pennyroyal.

‘ CONSUMPTION.—MARSHALL HALL, an eminent English physician says: “If I were seriously ill of Consumption, I would live out of doors day and night, except it was raining or mid winter, then I would sleep in an unplastered log house. Consumptives want air, not physic—pure air, not medicated air—plenty of meat and bread. Physic has no nutriment; gasping for air can not cure you; monkey capers in a gymnasium can not cure you; and starvation can not cure you.”

EMETICS IN THE ONSET OF ERYSIPELAS.—Mr. HILTON, of Guy's, entertains a very high opinion of the usefulness of emetics given in the commencement of erysipelas. A case of amputation recently under his care, had erysipelas over the stump, one morning, about a week after the operation. The man was ordered to take twenty-five grains of powdered ipecacuanha, with half a grain of tartar emetic immediately, the dose to be followed by a purgative; subsequently, by ammonia and cordials.—The inflammation did not spread. A few days afterwards, Mr. HILTON took occasion to direct the attention of his class to the abortive treatment which had been adopted, stating that he believed that, in a large majority of instances, the disease might be stopped by the early adoption of it. It is an old plan, but, with many surgeons, seems to have fallen into unmerited neglect.

CURE OF ITCH IN HALF AN HOUR.—Dr. E. SMITH, at a meeting of the London Medical Society, called attention to an article in the *Gazette Hebdomadaire*, by Dr. BOURGUIGNON, in which is confirmation of the value of the treatment of itch, in Belgium, by sulphur, combined with lime, in a liquid form. The remedy is prepared by boiling one part of quicklime with two parts of sublimed sulphur, in ten parts of water, until the two former are perfectly united. During the boiling it must be constantly stirred with a piece of wood, and when the sulphur and lime have combined, the fluid is to be decanted and kept in a well stoppered bottle. A pint of the liquid is sufficient for the cure of several cases. It is sufficient to wash the body well with warm water, and then to rub the liquid into the skin for half an hour. As the fluid evaporates, a layer of sulphur is left upon the skin. During the half hour the acarus is killed, and the patient is cured. It is only needful then to wash the body well, and to use clean clothes. In Belgium, the treatment is introduced by first rubbing the body for half an hour with black soap; but this does not appear to be necessary. The only essential act is that of the careful application of the fluid sulphur. The lime is of no importance in the treatment, except to render the sulphur soluble, and such would probably be the case if potass or soda were employed. The chief point in the plan thus employed, which is an improvement upon the mode of application of sulphur in substance with lard, is the

more ready absorption of the remedy, and, consequently, the more certain and quick destruction of the insect, by using sulphur in a fluid form. In so disgusting a disease, it must be of great moment to be able to cure it in half an hour.—*Association Med. Journ.*

WATER HYGIENE.—“The tanks for water in India are covered with a green weed,” says the *India Annals of Medical Science*, for May, “and this at the same time that it imparts a greenish hue to the water, possesses a remarkable power of filtering it, and rendering it sapid and wholesome; for where you have this green weed, you also find small fish and infusoria, which preserve the water also. Sir CHARLES NAPIER, inspecting the hill districts of the Punjaub, observing the Bheestees drawing water from one of these tanks, ordered it to be immediately cleaned, and the authorities fearing to remonstrate, the mandate was obeyed. The result was that the water soon turned putrid, and it was not till a fresh crop of duck weed had grown that it became clean and drinkable.” When marshes can not be drained, the best prophylactic of fevers is to plant the marshes with aquatic plants, and such trees as alders and poplars.—*Ibid.*

COVERING PILLS WITH COLLODION.—M. DRUDE recommends that the pills, when rolled, should be well shaken in a box after having poured a few drops of collodion over them. They become in a few minutes covered with a fine coating of this, which gives them a shiny appearance, and wholly prevents their taste being perceived. They are to be left exposed to the air for a few minutes, in order that the smell of the ether may disappear.—*Med. Times and Gaz.*, Oct. 25, 1856, from *Buchner's Repertor.*, No. III.

THE VAPOR OF AMYLENE.—On Saturday last we again saw this substance employed by Dr. SNOW, in place of chloroform, at King's College Hospital. It was first given with good effect to a child with a nævus, then to another with a hare-lip; in both it seemed to answer very well. In a third case, of plastic operation of the face of a man, although there was some amount of consciousness, complete insensibility to pain was manifest; and when the operation was concluded, which moreover occupied

some time, the faculties were very quickly indeed restored, and the man walked to the wards without support, instead of being carried, as after chloroform. The effects of amylene were fairly tested in this case, and were as satisfactory as could be desired. In a fourth patient—an elderly plethoric female—anæsthesia appeared to be more completely produced than in any of the others, with some slight coma, and, for a very short time, complete unconsciousness. In seventeen instances in which Dr. SNOW has given the amylene, in not a single one was there any sickness or vomiting, which, we think, is a decided advantage over the chloroform, although it requires a much larger amount to be used to produce its desired effects. Dr. SNOW believes a substance will yet be found that will produce anæsthesia without loss of consciousness.—*London Lancet*, Jan. 10.

SUBSTITUTE FOR COD-LIVER OIL.—Dr. G. P. CAMMAN directs attention (*N.Y. Journ. Med.*, Jan., 1857.) to the oily substance taken from the cavities in the head of the spermaceti whale, known in commerce as the head matter, and which he recommends as preferable to the cod-liver oil, an account of being more agreeable to the taste, leaving a pleasant flavor in the mouth, and also being more nutritive and soothing. It is, he says, less apt to disagree with the stomach, and does not cause offensive eructations. The patient may take it either pure, in coffee, or with bread, boiled rice, potatoes, etc. When required, tr. opii camph. and syr. ferri iod. may be added.

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OF TWO DOLLARS.—S. Mansfield, Texas.

SCIENTIFIC EXAMINATION IN MURDER CASES.

GREAT facilities are afforded by microscopes, chemical tests, and the researches of modern physiology in affirming or disproving circumstantial evidence as to murderers. Dr. H. BURDELL was found stabbed in his own room in this city on the morning of the 29th ult. There was bad feeling existing between him and his house-keeper, and many circumstances fastened suspicion on her and one of the boarders, but science has removed some of what were at first strong indications of guilt. A dagger was found in her drawer faintly stained with blood; these stains are proved by chemical analysis to be rust. A very palpable bloody stain on a blue silk dress, proves to be sugar, or fruit preserves, and blood found on various clothing about the house, is traced to other sources by the same agency. A knife from the place of business of the suspected boarder, and a newspaper found in his room, showed stains which responded to chemical tests for blood and under the microscope showed the blood discs or red globules to be arterial. This will probably weigh somewhat against him.

It will be recollected that in the investigation which resulted in convicting Dr. WEBSTER of the murder of Dr. PARKMAN, in Boston, the microscope applied to blood on the shoe of the former, disproved his explanation that it was from butcher's meat, by showing the globules, or blood discs to be round instead of longish, or egg formed, as are those of animals.—*Scientific American*.

The last paragraph of the above contains a grave error. The blood discs of all Mammals (that is animals that suckle their young) are round, like those of human blood; with the exception of some of the camel tribe. The mere roundness of the blood discs then would not prove their origin, for all our common 'butchers' meat' animals have round discs. Birds and reptiles have oval ones. The musk Deer has the smallest discs; they are only one twelve-thousandth of an inch in diameter. In man they are four times greater diameter, that is about one three-thousandth of an inch in diameter.

It is a very interesting sight to view these globules chasing each other through the veins and arteries, as may be done by placing the web of a frog's foot, or a fish's tail, or mouse's ear, under the microscope.—*Exchange*.

T H E

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LECTURE ON PUERPERAL FEVER. *

BY W. TYLER SMITH, ACCOUCHEUR TO ST. MARY'S HOSPITAL, AND
LECTURER ON MIDWIFERY, ETC.

ABOUT three thousand mothers die in childbed, annually, in England and Wales. This is an average of nearly eight deaths every day from this cause. The proportion of maternal deaths to the births, registered in several years, was found to be 1 in 171. This mortality, it must be remembered, occurs for the most part to women in the prime of life, and previously in the enjoyment of full and vigorous health. Among the causes of death during the puerperal period, the disease we are now considering is, of all others, the most important and fatal. The fatality from childbed fever is, however, in the present day, moderate, when compared with the epidemics of the former times, in which, of those attacked, positively none recovered; but though it is still little amenable to treatment, when it exists, there is reason to hope that preventive medicine may hereafter almost, if not entirely, eradicate this formidable disease.

The histories of puerperal epidemics and outbreaks show great diversity in the symptoms and progress of the disorder at different times. This disease evidently varies with the constitution of disease at the time it prevails, being at one time intensely inflammatory, at another time putrid, in its form. In some seasons and places the liver, in others the peritoneum, in others the uterus, in others the intestinal canal, have been attacked; and in some of the worst examples, pathology has found no other change after death than fluidity and altered color of the blood. It may

be said, in fact, upon a review of the numerous descriptions of puerperal fever, that there is hardly a form of fever or inflammatory disease which it has not, to some extent, resembled in character. The great diversities witnessed in this disease have led modern observers to assert that under the term "puerperal fever" many different and separate diseases had been described, such as phlebitis, peritonitis, hysteritis, enteritis, typhus fever, remittent fever, erysipelas, toxæmia, and other forms of disease. The tendency has been, in modern times, to dwell upon the special manifestation of the diseases, and to consider that all the various phases of the disease depend on some local disorder, or upon some specific combination of morbid phenomena. One after another, various morbid conditions have been thought to form the chief part of the disease. At the present day, the doctrine of uterine phlebitis may be said to hold this kind of pre-eminence, and there is a general tendency to consider that all the local and constitutional symptoms and pathological changes arise from this source.

The more puerperal fever is investigated and tracked, as it were, to its elements or origin, the less satisfactory does any partial or local explanation, of its nature become. In the progress of such examination, it appears more and more evident that there is a puerperal poison to which the lying-in woman is liable, and which produces all the varied phenomena of puerperal fever met with in different epidemics, localities, seasons, and constitutions. In one time or person, peritonitis is produced; in another, metritis; in another, mammary or other abscesses; in another, low fever; in another, intestinal irritations; in another, dissolution of the blood, without a trace of local inflammatory disorder; and so on throughout the list of local or special disorders which have been described by authors in puerperal fever. It may be questioned, even, if phlebitis ever occurs without a poisoned condition of the blood, produced either as the result of contagion, epidemic influence, or the absorption of putrid matter from the uterus.

Thus, in the earliest pathological arrangements, a great number of disordered states were grouped together as puerperal fever, without attempt at discrimination or analysis; next came a laborious separation of the different forms and manifestations of the

disease ; and the subject seems at the present time ripe for allaying the numerous affections met with in puerperal fever together, in their origin from a common cause—namely, some Animal Poison or Zymotic Influence.

Of the occasional sporadic appearance of puerperal fever and its allied disorders, there can be no doubt. In all seasons, taking large communities, or large areas, isolated cases are met with in different localities, and in the practices of different medical men, where single patients are attacked, and where the disorder is not so severe as to extend itself by contagion or infection. In these cases, when the poisonous element is produced by the patient attacked, it probably originates from the state of the blood incidental to delivery, or depends upon the absorption of irritating or putrid lochial discharges, decomposed coagula, or portions of retained placenta. A single case produced in this way, may become contagious, and cause the disease in other patients, through the medium of nurses or attendants. It seems to be clearly made out, that in cases of this kind, and, indeed, in all cases in which contagion or infection is concerned in the propagation of puerperal disease, the risk of the spread of the disorder is greater in proportion to the adynamic type of the cases which first occur. In inflammatory cases, the risk of the communication of the disease is less than in the purer forms of fever. The most convincing proof of the sporadic origin of some cases of puerperal fever is found in those instances in which single cases occur, and no other cases happen either in the neighbourhood or at about the same time.

As distinct from the sporadic appearance of puerperal disease, we have epidemics of puerperal fever, or puerperal inflammation, in which the disease, in its various complications, rages in certain hospitals or districts, being very dangerous at the outset, attacking the patients of different medical men simultaneously, prevailing for a certain time, and then becoming weaker and more manageable in type, until it at length disappears altogether. Epidemics of puerperal fever originate in the crowding of puerperal women together ; and in the epidemic prevalence of erysipelas, hospital fever, typhus, or other disorders allied in their nature to the puerperal disease. In epidemics of this as well as of other disorders, it is exceedingly difficult in any given case to prove

whether it arises from epidemic or contagious influence. The best proof we have of the existence of puerperal fever in an epidemic form, is drawn from those examples in which the disease appears in certain towns or districts and affects the patients of all the medical men alike, but it is certainly not confined to the practice of one or two accoucheurs. It is observed that when puerperal fever prevails epidemically in the human subject, the lower animals die in large numbers of diseases connected with parturition.

Besides the sporadic and epidemic appearance of this disease, we have, in my opinion, evidence as irrefragable as that which can be advanced in the case of any other malady whatever, that it sometimes rages as the result of contagion and infection. Those who deny the influence of contagion, magnify the facts relating to the sporadic and epidemic prevalence of this disorder, and seek to apply them to the universal explanation of cases in which contagiousness appears most manifest. It is natural, observes Dr. FARR, for any man to shrink with horror from the supposition that he has communicated so fatal a disease to his patients and to be disposed to receive any other explanation than that which refers it to contagion. Nevertheless, interests of truth and humanity demand that the evidence of the contagiousness of puerperal fever should be put prominently forward.

The following are examples of the kind of evidence which exists in proof of the contagiousness of puerperal fever, and it may be necessary to state that facts of a similar kind to those now advanced might be multiplied to almost any extent:—

A practitioner, for instance, had been attending cases of typhus fever. Within the space of four days he delivered five women. All these women were attacked with puerperal fever, and all of them died. This was in a country practice, and the cases were remote from each other. Different practices intersected the practice of this medical man at various points, but no other cases were known to have occurred in the neighborhood. Again, a patient suffering from typhus fever was admitted into a lying-in hospital, where she remained for a few hours only. In the beds on the right hand and the left of the patient were two lying-in women; both were attacked almost immediately with puerperal fever, and both died. Take another case; a medical man was in constant

attendance upon a patient suffering from gangrenous erysipelas, and between the 8th of January and the 22d of March he attended the labors of ten women; all had puerperal fever, and eight of the patients died. This was in a town of moderate size, and no other patients in the place were known to have had puerperal fever. In another recorded instance, two medical men, brothers and partners, attended in the space of five months twenty cases of midwifery. Of these, fourteen were affected with puerperal fever, a fatal result ensuing in eight cases. The only other known death from puerperal fever, in the same town, within the period named, occurred in the case of a patient attended by a medical man who had assisted at the post-mortem of one of the puerperal patients. During this disastrous period, the two brothers relinquished all their midwifery engagements for one month, in which time five of their cases were attended by other practitioners, and no instance of fever occurred in the course of that month. They then returned, and several fatal cases again happened. It is difficult to imagine anything more conclusive as regards the doctrine of contagion. A curious history in point is related by Dr. INGLERY. Two practitioners attended a post-mortem where the patient died from this disease. One was summoned in one direction to a midwifery patient, who was attacked with puerperal fever; the other attended two cases in succession, both of whom were seized with the same disease. Dr. ROBERTON relates, perhaps, one of the most cogent instances of contagion and fatality on record. In the space of one calendar month, a certain midwife attended twenty cases belonging to a lying-in charity; of these, sixteen had puerperal fever, and all died. The other midwives of the same charity, working in the same districts, attended in the same time 380 cases, none of whom were affected with puerperal fever. In a large town, containing many thousands of inhabitants, and numerous medical men, fifty-three cases of puerperal fever occurred. Of these, no less than forty happened in the practice of one medical man and his assistant.

In the face of such facts as these, it does not become us to hesitate, or give out an uncertain sound respecting the contagiousness of puerperal fever. It is better to know the worst, fear the worst, and guard against the worst, than to harbor undecided opinions. I have known several instances where medical men, believing in

the non-contagiousness of the disease, or hesitating between the two opinions, had gone on attending patient after patient with fatal results, until convinced of the mistake they had fallen into by successive deaths. No doubt sporadic and epidemic seizures are sometimes mixed up with those of a contagious origin, in such a manner as to require much clear-sightedness to penetrate the confusion; but the facts of contagion are, as it appears to me, placed beyond all question, and should never be lost sight of by practical accoucheurs.

Those who oppose the view of the contagious nature of puerperal fever, argue that the cases which seem most conclusively to demonstrate the communicability of the disease from one patient to another by the attendants, really depend on epidemic influences. They point also the occasional sporadic appearance of single cases in different parts of the same city or district, in the practice of different medical men. It is also insisted upon that in some cases lying-in women have been exposed to the influence of surgical fever, or have been present in wards containing patients ill of peritonitis, without contracting puerperal fever. The very intensity of the contagious principle has been used as an argument against the existence of contagion. It has been said—How could any poison cling to an accoucheur for several weeks, as in those instances where medical men meeting with puerperal cases have relinquished practice for a while, but on returning, have brought the disease back with them? Great stress has been laid upon personal experience, as in the case of Dr. MEIGS, who attended as the consulting physician upon numerous cases in an outbreak of the disease which occurred to another practitioner, but Dr. MEIGS himself never took the disease to any of his own patients. It appears to me that these difficulties are much more easy of explanation than the difficulties attending those cases in which contagion seems to be most convincingly proved. Some persons may be more liable to convey infection than others, just as one individual is more prone to infection than another. At certain times, from reasons which we can not understand, but which we know must exist, the human organism is in such a state that exposure to infection and contagion does not infect it. Perhaps one of the strongest arguments in favor of infection or contagion is drawn from the preventive treatment of the disease. All the great

reductions in the mortality have arisen from measures calculated to remove infection and contagion. In the course of a few years the mortality in the great hospital of Vienna was reduced from 1 in 10 to 1 in 74 of the mothers delivered, by the precautions taken to prevent the inoculation and infection of lying-in women. In this country the disease is much less formidable than it formerly was—a circumstance which is greatly owing to the care taken in preventing the spread of the disease by contagion and infection.

It is further necessary to insist upon the fact, that the contagious principle in the case of puerperal fever, is not limited to the transmission of puerperal fever, nor to the communication of infection from and puerperal patient to another, either directly to the lying-in woman or by attendants or nurses, but that it may be conveyed in the shape of several other animal poisons. One of the most remarkable points connected with the puerperal poison is the fact, that setting aside its sporadic and epidemic appearances, it may, in the first instance, originate from a variety of causes external to the patient herself. When once produced in this manner in single cases, it may be propagated among puerperal women by infection and contagion. The exposure of puerperal patients to the influence of hospital gangrene will produce the disease. Medical men in attendance upon cases of erysipelas have given their patients puerperal fever. It has been made out very conclusively by SEMELWEISS and other, that the miasms derived from dissecting rooms excite puerperal disease. Exposure of the puerperal women to the poison of scarlatina will give rise to puerperal disease in patients proof against the reception of scarlet fever itself. The mortality amongst childbed women seized with small-pox is well known, and such patients die with the symptoms of puerperal disease, in addition to the variola. With respect to the disorders named, and probably others also, such as putrid sore-throat and sloughs or abscesses, some law evidently exists by which they may all be respectively converted into the puerperal poison. In some cases, puerperal and erysipelas have been observed together at the same time, and in the same patient.

A curious circumstance connected with the poison of puerperal fever is, that it may be communicated in other forms to the nurses, or attendants, and even to males. The husbands of puerperal

women may be attacked by sore-throat, erysipelas, or typhus fever. Within the last few years an accomplished physician accoucheur of this metropolis was cut off suddenly by putrid fever, after examining a woman suffering from puerperal disease. In some of the cases where the same medical man has lost numerous cases in succession, as many men and women have died from fever or erysipelas, as those who have perished from the puerperal disease. Thus, we have evidence that erysipelas, gangrene, fever, etc, in males, or unimpregnated women, may produce child-bed fever, and we have the converse proof that this fever may excite other dangerous disorders, as the result of contagion, in non-puerperal persons.

How is this subtle poison conveyed from person to person? In what media of communication can it lurk? Through what channels can it reach the puerperal woman? The clothes, hair, and touch of the person exposed to the poisonous influence have been supposed to be the chief means of infection and contagion; but very remarkable cases are on record, such, for instance, as when the accoucheur has shaved his head, changed the whole of his clothes, cleaned himself by hot baths and vapor baths, and soaked his hands in disinfecting solutions, and yet he has taken the malady about with him. I believe that in such cases the blood of the person acting as the medium of infecting, is affected, and that by the breath, a certain halitus or infectious influence is given out, which acts upon the blood of the puerperal woman, through her lungs, and thus conveys to her system the germs of the disease. As this point has a practical bearing of some importance, I desire in this place to make a few observations which may explain the position I have assumed.

If we attend a post-mortem when the smell is peculiar, if we spend some time in a lying-in room where the odor of the lochia is very strong, or if we go into any very powerful smell, the taint evidently enters the body by means of the lungs, and can be perceived subjectively by the taste or smell, or its odor can be distinctly perceived in the saliva, in eructation from the stomach, or in the urinary, cutaneous, and other secretions. Although the party thus affected may not have been exposed to the miasma or smell but for a short time, his blood gives evidence of infection for many hours, or in some cases for several days afterwards.

Some habits are more prone to receive and retain this kind of infection than others. It remains so long in some cases that the odor would seem to have a power of sustenance or reproduction, otherwise it is difficult to suppose that an odor to which the lungs have been exposed, it may be for a few minutes, can infect the blood and all the secretions for twenty-four or forty-eight hours. If we can trace in this way the influence of a bad odor, surely we may admit that the same thing may happen with reference to the wonderfully subtle poison or germ in puerperal fever, or those influences which are evidently convertible into the puerperal poison, and manifest similar results in the lying-in woman. I believe that the blood of the accoucheur may take up a dose of puerperal poison without manifesting any special results in his own system, and that he may communicate it through the medium of the lungs to his patient. In the case of a poison so subtle, the air we breathe unites the circulations of the accoucheur and patient, and renders them, as it were, one. This is, probably, one great mode in which animal poisons generally are diffused. We know that the blood of persons attending patients in scarlatina, measles, and smallpox is infected, although they are proof against the disease; and in one remarkable instance we have the positive proof that the blood is the medium of infection. I refer to cases in which pregnant women who have had smallpox in childhood, and are proof against infection, but who, on being exposed to the poison, convey the disease to the fœtus in utero. Here the blood of the mother must be the medium of communication between the patient suffering from smallpox and the ovum hidden in the womb, and the lungs of the mother must be the channel by which the poison enters the circulation. This illustrates very well what I mean by saying that the blood of the accoucheur, or attendants, is one great medium which conveys the poison of puerperal fever. The saturation of the blood of the accoucheur, nurse, or midwife, may remain for a considerable time; for cases are on record in which every case attended by certain individuals for weeks or months have been affected by the disease. A practical point deducible from these remarks is, that in attending lying-in patients, after the slightest exposure to the puerperal poison, or to any miasma which can be converted into this poison, or its equivalent, in the lying-in woman, we should be especially careful not to go so near, as to establish any communication between th

lungs of the practitioner and patient. In saying this, I do not mean that other means of conveying the poison, as by clothes, hair, and the surface of the body, should not also be guarded against.

The fiercest outbreaks of this disorder have occurred in lying-in hospitals, or in hospitals where lying-in women are received with surgical and medical cases, and where erysipelas, gangrene, or fever has prevailed. On this account many have doubted whether lying-in hospitals are not mischievous rather than otherwise, in the present limited state of our knowledge of the means of preventing puerperal fever. Women confined even in misery and squalor in their own homes are less liable to this disease than patients collected together in hospitals, even when the greatest care as regards cleanliness and ventilation is observed. All lying-in women should, as far as possible, be removed from the neighbourhood of any contagious epidemic or infectious disease. It should be a rule of the practical accoucheur to have as little as possible to do with any of the animal poisons which give rise to puerperal fever. He should avoid autopsies, especially in cases of death from childbed fever, or ordinary inflammation. The student should not attend midwifery cases while he is dissecting. After an attendance upon any suspicious case, the practitioner should change his clothes, or have them hung up in a room exposed to the fumes of chlorine; I have no doubt it would be useful for him to inhale the diluted fumes of chlorine several times a day, and after touching anything connected with any source of danger, to rinse his hand in a solution of chloride of lime or chloride of zinc. It is impossible to be too scrupulous, in a matter of such moment, and I have known some accoucheurs, who, on entering a lying-in room, always wash their hands before making an examination.

In the next lecture I propose to consider the special characters of puerperal fever in its various manifestations, and the rules of treatment.—*Lancet*, Nov. 8, 1856.

SLEEP—ITS PHYSIOLOGICAL USE.

(CONCLUDED.)

Just when all the animals, except a few, retire to rest, when all the useful laborers of every class have finished the labors of the day, the votaries of fashion begin the toils of the night, and like the flies and moths, that are woke and roused up by the splendor of chandeliers, they buzz around the objects of their admiration and worship, until they are exhausted. Even the pauper patient at our hospitals, enjoys sleep—whereas the lady, whose income counts by thousands, can not have one night's good sleep. Oh! ye poor rich!

Almost all headaches arise from deficient circulation in the brain; and nothing is so beneficial, nay, so absolutely requisite, as plenty of sound *sleep*. The remedy for *Tic Douloureux*, or *Neuralgia*, is *sleep*. One good night's *sleep* is of more use to a *cough*, than any remedy of the entire *materia medica*. If, on “*taking cold*,” as it is called, we can lie down, wrap up warm, and *sleep*, our fortune is made—we are recovered. The best medicine that we can give in *fever*, is *sleep*.

Sleep restores to the brain its circulation and functions; and the healthy and active condition of the brain causes a healing and healthful circulation of blood in every other part of the body. We have known of cases of fever of the lowest and worst kind, cured completely by the taking of some interdicted substance, as cold water, ale, or wine, causing a sound and long *sleep*. The patient has awoke to health.

In most cases of *simple insanity*, if *sleep* can be induced and repeated, the symptoms will disappear. External and internal warmth are requisite to induce *sleep*.

In one of our tours in a foreign land, in search of the picturesque, we had been out all night, moon and star-gazing, and then spent the morning in exploring the ruins of an ancient castle.—About noon we were exhausted, and it being the middle of summer, we lay down in a field of grass, and slept for three hours.—We awoke, refreshed in mind, but shivering in body. The sun warmed one side, but the dampness of the ground cooled the other, and we felt there was a serious illness coming on. We had four miles to walk to our resting-place, and never did we walk four *such* miles! Each mile seemed to be four.

Arrived, we drank two tumblers of hot brandy and water, and as much hot tea, and then lay down before a good fire, upon, and wrapped in, blankets. We slept from eight to eleven *there*, and then went to bed and slept till five, then we awoke as well as ever, ready for a new tour. Sleep saved our life.

During one of the hot summers, a child three years of age, crawled up one of the houses in Eleventh Street, and fell out of the *fourth story* window, to the ground, which was *not paved*. The child was taken up, apparently dead, and laid upon a bed—we being sent for, more for the purpose of giving a certificate for interment than for medical aid. We found the child asleep, and the breathing not *stentorous*, that is, not *hard, forced, loud*. We examined the limbs and head, and found no fracture. We bade the mother leave the child to its sleep, and said we would call again. In two hours we called again, and the young one was running about, as well as ever.

One of the ablest scholars and finest writers of the age when a student, attempted a voluntary Latin task, and was obstructed in the middle of it by a passage in *Virgil's Æneid*, which seemed to be incapable of translation; he bored his brain with it to no purpose, until he fell asleep. He slept four hours, and when he awoke, *the passage translated itself*. Afterwards, when he was puzzled, he tried a reasonable time, and if not successful, he put the difficulty and himself to sleep together, and the solution invariably occurred.

☞ If every person who suffers a loss, sustains an injury, receives an affront, is subjected to an insult, or placed in a difficulty, could have a good sleep before the trouble is examined and disposed of, one half of all the hardship would usually be gone, and what was left would be more readily dealt with.

☞ As a rule, those discourses, lectures, and sermons which induce sleep, *ought to be slept out*. If the air be bad from closeness, or heat, or the position be unfavorable, or the light be weary, the fault may not be in the discourse; but as a rule, *discourses which make us sleepy are not worth hearing*.

We had a fellow student who had in him some of the spice of life—fun and wit. He had fever, and his good aunts were very anxious about him. One day they were questioning the physician as to the best means of obtaining sleep for him. He recom-

mended a hop pillow and a composing draught. "Oh!" said my fellow student, "bring our minister here, and let him preach to me—I shall be sure to go to sleep in a quarter of an hour."

Students and men of business, who deprive themselves of sleep, only deprive themselves of capacity for their pursuits. The great PITT, who was Prime Minister of the British Empire at the age of *twenty-five*—died at forty-two, for want of sleep.—KIRK WHITE died when but a youth, for want of sleep. Lord LIVERPOOL—Premier of England—died insane for want of sleep. On the contrary, those who sleep too much, are fat and heavy, being what is familiarly known as pudding-headed. Sleep enough, but sleep not more than enough.—*Scalpel*.

VARIOLA

Origin—Vaccination—Inoculation—Treatment. †

BY R. RICHARD CLAY, M. D.

AHAROUN or AARON is the first writer who mentions small-pox (622. B. C.) under the name of *djidri* which was subsequently rendered by the Latin translators, variola. Rayet, in his work on diseases of the skin says :

"It is generally believed that the first eruption of small-pox occurred in Arabia. According to an Arabic manuscript, in the library of Leyden, it seems to have appeared there about the 572d year of the HEGIRA. Transported into Egypt in 640, at the period of the conquest of this country by the Caliph OMAR, (*Paulet. Histoire de la petite verole*, 12 mo. 2 vol. Paris, 1768) it afterwards spread in all the direction, in which the Saracens carried their arms. In this way it reached Spain, Sicily, Naples, and France, from whence it was communicated to the rest of Europe and to America. There is a passage, however, in the Chronicle MARIUS, Bishop of Avenches, which might lead to the belief that small-pox had appeared in Europe, long before the date usually assigned to its introduction.

Vaccination is not a sure preventive of small-pox, neither is variola. The former will protect to the same extent and in the same manner as the latter. Of 1000 boys in the Royal Military Asylum,

says Dr. BELFOUR protected by previous small-pox, 6·15 and out of 1000 protected by vaccination, 7·06 were attacked subsequently by small-pox showing conclusively as regards children under puberty that small-pox after small-pox occurs in very nearly the same ratio as small-pox after vaccination. An inquiry instituted by the Epidemiological Society of London, a few years since resulted as followed, viz.: Out of 347 medical men protected by vaccination, 44, or 12·6 per cent, have had variola; and of 82 who had been inoculated, 3, or 3·6 per cent, had variola subsequently. This statement should not, however, be accepted as the correct ratio to which physicians are liable to variola, as no doubt the inquiries, in many cases, were addressed to selected persons, who were known to be extensively exposed to the small-pox. Besides, many of the cases might have been variolous inoculation in the dissecting room. Of 18 with no visible cicatrix, 3 had had small-pox, or 16·6 per cent.; and of 32 who made no mention about cicatrix, 6 had had small-pox. Of 235 with one or two cicatrices, 33, or 14 per cent.; but of 62 with three, four, or more cicatrices, 2 only, demonstrating beyond a doubt to my mind, that so far as these statements go, a person having more than two cicatrices is no more liable to variola than one who has previously had small-pox. SEATON, of London, says, from observations made in various epidemics, and the records kept by Mr. MARSON, at the small-pox hospital, it appears that the mortality from small-pox in persons reputed to be vaccinated was not more than 3 or 4 per cent., under favorable circumstances; not more than 7 under the most unfavorable, while the mortality of this natural small-pox varied from 20 to 35 per cent. Mr. MARSON has shown by analysis of post-vaccine small-pox that in well vaccinated persons, having more than two cicatrices, the mortality was less than $1\frac{1}{2}$ per cent. And for this glorious result we are indebted to the

“Immortal JENNER, whose gigantic mind

Brought life and health to nearly half mankind”

The “*London Lancet*,” for 1857, in speaking of the Report of Indian small-pox Commissioners, makes the following statement:

In India, up to the date of the present commission, hordes of Ticcadors, or vaccinators exist and are even sanctioned and salaried by the Indian government. They are sometimes Brahmins, but

generally they are of low castes and trades and uneducated. It is their interest to represent inoculation as a religious rite, and to prefer it to vaccination. They declare the human variety of the disease infinitely preferable to the vaccine. The progress of inoculation, or the eruption of small-pox is looked upon in a religious quite as much as in a medical point of view. When a person is inoculated, the goddess SITULA, presiding deity of small pox, is invoked with sundry rites, and various ceremonies are performed by all pious Hindoos. The same occurs after small-pox has been taken naturally. Some refuse inoculation altogether, as irreligious, and when attacked, believe that the first child or individual fatally attacked is a propitiation to the goddess SITULA and insures the preservation of the rest. It is remarkable that some of the Hindoo superstitions are favorable in an extraordinary degree to the preservation of the variolous poison. Thus in the bazaars and other places, many married brothers and sisters live together and it is a religious dogma not to inoculate pregnant women. The consequence is, that as some of the women of a household are always *enceinte* there is always present the material for the contagion of small-pox to work upon."

No physician is justified in practicing inoculation, and every medical man should always be supplied with pure vaccine lymph. He is also under professional obligations to see to obtaining this personally, from healthy persons or of some one on whom he can rely. The writer once knew a whole community to be infected with

"That dire disease whose ruthless power
Withers the beauty and transcient flower,"

Simply by a neglect of this precaution on the part of the village physician. He purchased of a *villain* what he supposed to be vaccine, but which proved to be small-pox scabs.

As every physician is undoubtedly familiar with the diagnosis and prognosis of variola, and should there be any who is not, as he can easily obtain such information from books, I will pass over these two points and consider the

Treatment.—Variola is no respecter of persons; it spares no age nor sex, not even the fœtus; but it attacks alike the rich and the poor, the Christian and the infidel, the civilized and the uncivilized. And when once it has seized its victim it does not release

its grasp until it has passed through its various forms, the stage of incubation, invasion, eruption, suppuration and desiccation. No medical treatment can arrest its progress. The physician can only direct the disease to a successful termination, as a faithful pilot would direct a ship to a port of safety. Very little medicine is required in the treatment of variola; but it is a malady which should be closely watched from commencement to termination, by a *scientific* physician, in order to combat any unfavorable symptom which may present itself and also to prevent the pitting and consequent disfiguration of the face. The latter is of no minor importance to our patients, especially the feminine portion of them. The ladies never knowingly do anything to detract from their beauty, nor neglect that which will add to their charms,

And it is the duty of the physician to preserve unblemished, so far as possible, the graces of his patients, as well as their health.

The pitting can be prevented; and I trust, dear readers, it may never be said that the small-pox visited your young, fair lady patients,

“And rifling every youthful grace,
Left but the remnant of a face.”

When called to treat a case of variola, see that your patient's apartment is large and well ventilated; give a mild aperient to open the bowels if costive; during the eruptive fever, sponge the body in tepid water; and give the patient a plenty of cold water, acidulated with lemon juice. In affections of the larynx with difficult respiration, apply leeches. The practice of puncturing each pock previously to its coming to perfection and then treating it with poultice, as a common abscess, has succeeded admirably in my hands in preventing the tracks of variola from being left upon the face.

An eminent physician, of London, in speaking this method of treatment, says:

“I have had seven cases, four wherein the larynx was not at all affected, on which I tried the experiment of puncturing every pock on the face, and afterwards applying repeated poultices. This treatment succeeded to my utmost satisfaction, the face being left as clear of marks as it was previously to the attack of small-pox. I had three more with affection of the larynx, the respiration being so difficult that I expected asphyxia would come on in a few hours. To these I tried leeches over the region of

the larynx, and on the following morning, I found the respiration had become perfectly free and easy.

One of the three cases last reported, is that of D—— laborer.

This was the worst case of confluent small-pox I ever witnessed in the whole course of my medical career. He was in the early stage of the disease attacked with great difficulty in breathing; his tongue, soft palate, pharynx, and larynx, as far as I could see, being covered with pocks. I applied leeches at night, and on the following morning his breathing was perfectly free and easy. His face was so completely covered with pocks, that I could not find one space over his whole face, sufficient to lay on a grain of sand, which was uncovered by any pock. In this case I punctured as many pocks as I could myself, and requested his mother and sister to puncture the remainder. He is now up, and doing well, and he has not a mark upon his face; but upon this case I will report to you hereafter. In this case the feet were very painful previously to the appearance of the pocks. I applied, poultice."

PHYTOLACA DECANDRIA, IN GRANULA CONJUNCTIVA.—By Dr. C. S. Fenner, Memphis, Tenn. I direct a half peck of the root cut into small pieces, to be put into a kettle, to which is added four quarts of water, to be boiled to one quart and strained. Of this, a wine-glass full may be taken every two or three hours. The dose should be sufficient to produce fullness of the temples a few minutes after it is taken. Besides fullness of the head, it causes flushing of the face, a general glow, perspiration of the entire surface, often fullness of the stomach and nausea. After five days, it usually acts on the bowels, when an anodyne should be used, and the quantity diminished. Patients fully under the influence of it, often expose themselves and take a severe cold, without affecting the eyes in the least. With this remedy, I am able to cure cases of Granula Conjunctiva, beyond my reach with other means. Relapses and exacerbations are wholly prevented by it.

LECTURE TO THE MEDICAL CLASS OF THE
AMERICAN MEDICAL COLLEGE.

BY PROF. E. H. STOCKWELL, M. D.

THE people demand the cure of existing diseases, and the prevention of coming ones. It is also required that the former be done speedily, and permanently. These wants are universal, urgent, and imploring. The whole race co-operate in swelling these requisitions. From infancy to senility is the appetite craving for restoration and exemption. These needs have been, are now, and will be. So sincere, positive and imminent are these wants, that all, but life, is quickly bartered for their satisfaction.

In view of this, would you, or I, or any one, be justified, upon any principle, in an effort to supply these necessities? Certainly, in a pecuniary sense, they will remunerate outlay and effort. And upon a moral principle, where could philanthropy find so fit a field! And intellectually, there is not a department of human research, so vast, varied and rich, as the one that can furnish the supplies that can meet these demands of the race.—Therefore, physicians are abroad; the kingdoms of nature are ransacked for remedies; students congregate and learn the mechanism of organization, and laws of life; journals are disseminated, records are made, colleges are instituted, societies formed, science cultivated, inventions encouraged, and discoveries made. Hence too, that quacks, imitators, and nustrums flourish; also the isms, bigots, fanatics, and partizans; and for the same reason are our scholars, philosophers, and freemen sustained.

Notwithstanding the Herculean effort of the profession to cure disease, it is as universal and destructive as ever, and liability to it has not diminished—now, we find our remedies and prophylactics fall far short of the world's need, and our desire. There are to-day ten purchasers to one genuine reliable remedy, also, to one preventive. Our therapeutics, though old, multitudinous, and broadcast, yet are limited in power, can do but a little more than modify the action of organs, whose ability is already superior to the cause that embarrassed them. Great poverty marks the materia medica by whomsoever possessed. They are but a trifle more than equal to mild, and incipient diseases.—

The grave maladies they scarcely approach in their rapid, frightful career. Even the severe ills of life often vanquish both patient and remedy.

As for our provident Hygeia, her birth has just occurred; she is not even a twelve month old. I much doubt whether her advent is known outside of the circle of the choice scholars of the profession, and with many her coming is not dreamed of.—Among the routineists, bombardiers, and assault-and-battery doctors, years will lose themselves in the past, before our generous goddess, will be known. With such, disease is a thing, a visible enemy, to be met, fought, and captured, to be hurled from the body by all the power of drugs. An inherent conservative force, vital institutions, the limitation of exciting causes, the self-consuming nature of a foreign irritant, modifications of mind, the furnishing of suitable means and conditions, are overlooked, or considered insignificant. The sublime truths, and potent resources of vital, mental, and hygeanic therapeutics, are to them yet unrevealed.

Among us is a belief that there is somewhere, either discovered, or to be, a remedy for every disease, however mild and grave. This faith is the parent of existing sects, and will be the mother of scores to come. The ardent and over sanguine are looking for the great coming Physician! He is approaching with agents that can abolish the law of punishment! Violation in their fervid hope is to be crowned with the fruits of obedience. The physician then can daily perform miraculous acts—reconcile temperance with intemperance!

Besides, among the faithful to science, there is another faith of some relation to this, perhaps a cousin, some say sister. It is that a great Teacher is to visit us. It is that an insurance from disease is to be offered to us. It is that a prevention is possible. It is that the arena of life contains all we demand for vigor and longevity. That our coming Instructor will make plain to us the secrets of organization; the secrets of will, thought, and feeling; of birth, development, and growth of life and death—so clearly, so faithfully, and so practically—that the art of health will be so simple, and so potent, as to prevent all but accidental injuries—so complete that our translations will be as natural as our births—that our departure will be as rational as our coming.

The history of medicines, the therapeutical possessions of all parties, and the announcements of science, convince me that the former belief will never be realized. It is an offspring of the fancy. In one sense it is a phantom. As a doctrine, it will lead the student away from the fountains of science. It is baseless. It tends to obscure principle, to lessen the importance of conduct, to darken the free-agent, to the covering up of duty, and to the increase of dependence, folly, and violation. While philosophy, from all her departments, sanctions the latter belief—the judgment that the organization of man when accurately understood, will furnish us with a guide that will enable all to forestall disease by living orderly.

While we denounce the faith in the perfect sufficiency of Medicines, as chimerical, at the same time we know that new medicines will be discovered; existing ones will be greatly improved; the inert portions of drugs will be removed; the essentials only will be retained: their modes of administration are to be greatly bettered; instruments facilitating their application will be invented; we may even expect indefinite progress in the preparation and administration of medicines, and we may discover agents more potent than any now known. But at last we must remember that it is not the nature of remedial agents to diminish diseases, nor in fact to cure them. They come by violation. While health is the result of habits that comport with the laws of our being, drugs can never correct the enslaved appetites, nor the follies, and crimes of the mind. Nor can they ever mend a breach.—They have no nutritious principle. They impress susceptible tissues, dissolve, neutralize, corrode, and lubricate. But they have not the least formative power, nor aliment. Transgression enfeebles the body, and it then becomes unequal to its office, and a prey to surrounding circumstances, and they farther prostrate it. Then therapeutic means may be prescribed, as the whip is to the over-burdened pack-horse, but if there is not a reserved available power, no result will follow. The power to recover lies in the tissues. Drugs can never impart it to them. They merely draw it out, if there. The sick man is not a well man tripped up—merely chained—but he is incarcerated by weakness, bound by loss of power, prostrated, because to stand up is impossible.—The confederated spirit is lessened because of repeated exposures,

excesses, follies, errors, neglects, and antagonistic circumstances. The silent invisible hand of concord has departed. Rebellion here, impotency there, and disorder throughout, in such a state what can a stimulant do? What can a drug do that is entirely restricted to the office of provoking action? In itself there is no force. Upon inanimate matter it exerts no influence. But to animate, it is related, as the whip is to the back. In disease, the force for an emergency is gone with that for an ordinary occasion. Then we can make the surroundings compatible with what life there is; furnish air, water, food, and clothing; cheer the mind, adjust dislocated parts; remove perceptible irritants, but how much can we do with medicaments? Considerable, if there is not much required, but little when they are most needed.

Though this be so, the energies of medical men for the most part, are engrossed by the *Materia Medica*. This has monopolized our attention, because it contains seemingly what the healer requires. To day the pill-box has converged upon it nine-tenths of the mind of the order. A drug to most is magnetic. The needle of their thought points to *Panacea*.—Chemistry and our organic science are ignored. The very fountains of knowledge—guides as true as the infinite, are discarded. A pilgrimage by many to these homes of truths and principles for light, would be as unreasonable, as one to Mecca.—Such would divorce cause from effect, principle from practice, philosophy from phenomena. Art with them is above and independent of the torch of science; they seem to believe in chance, at least omnipotent and all-pervading causes are overlooked.—Nothing is more barren than practice without an intellect. Of all relations that of science to Art in the physician is most demanded. But he that would disembody principle, is as far from a true position, as the one who would never look up from the effect to its cause.

The world is hungry for relief and exemption from disease, but it is meagerly supplied. The effort for medication has been immense, gigantic, and a partial satisfaction is the result. Enactments by the great Legislator, for sickness, as for sinews and muscles, have been solicited, expected, sought for, but never discovered. Thus far remedy does not run parallel with the breaches in our bodies. Hunger is met by food. Here certainly

has been a legislation. But our cancers, tubercles, plagues, and Yellow-fevers, are not met with what will appease their appetites, for they consume patients, remedies, and physicians.—From the fact that they are not necessary in the order of things, they are absolutely mischievous, creatures of time, come by evil, are evil themselves, and are destitute of scientific basis, and consequently are destitute of certain cure. Disease and remedy are alike outside of the plan of things, are alike evil, and of the two we choose the least. Like government—the results of circumstances—the lack of individual rule, and where they do occur, we are called upon to bring to bear, the best patch-work within our knowledge. At best, the practice of medicine is an evil of less magnitude than sickness, but often puts disease to shame, in its ravages. Therefore, we say that drug treatment is necessarily imperfect and never will but partially meet the wants of a sick race. Consequently our attention, finally is directed to the art of guarantee—Hygeian. But here, as elsewhere, art must be illumined—it must have the guardianship of principle. Even the little good done by medication is in virtue of the science that wields it. Hence we are pleased to be able to see, that while the patient demands remedies and prophylactics, the physician requires a profound knowledge of man. The major interest of the profession lies in paying the maximum attention to flesh and blood. Without an accurate knowledge of the science of life the physician has no compass; his prescription, if ignorant of body and mind, will be but a blow struck in the dark; a shot as likely at life as at disease; a mere dare-thrust, ignorant alike of foe and friend; mere brute-aid at random; a fellow-feeling, but destitute of intelligence; compassion but blind. It is not enough for the devotees of medicine to say that they use sanative medicines—that they furnish embarrassed nature with conditions, and that they believe in nature. For the fitness of any prescription, however innocent, the furnishing of compatible circumstances, and faith itself, are dependent upon a fresh and thorough acquaintance with our great science. Destitution here, however good the motive, faithful the attention, and innocent the aid, will be often followed with alarming consequences. We have but one light, it is that which radiates from structure, functions, and derangement. The beams from this lamp are not illusory, but re-

liable. They banish night, and bring the effulgence of noon.—They can not mis-direct. It is their nature to point out the way, to make plain the path. These sciences are all-sufficient. We are weak because we do not feed on their instructions. We err because we are in the twilight of their rays. We fail because we linger in the shadow of ignorance, and do not come into the radiance of reason.

The body has normal facts, and the principles for their explanation ; it may have abnormal facts and contains their philosophy ; the mind too has its healthy and unhealthy phenomena, and their reasons ; the body has its necessary means and conditions and antagonistic ones, and they embrace a why ; the mind's proud will and clear reason have their dependences, and opposing circumstances, and in them are found a philosophy. Therefore, our wonderful science of anatomy, our beautiful physiology, our complicated pathology, our useful therapeutics, our attractive chemistry, our important hygeian, and our transcending psychology. In these are the needs of the physician—the science of medicine, from which springs the light demanded to preside over the art of healing, and the art of health. Here stored for this age by divine forethought, are the very supplies that the world wants through the physician. The truth of this requires no demonstration. We all know it who have given it serious attention. It is to me self-evident ; besides, every step taken by our advanced students, not only sustains our previous confidence, but augments it. Every fresh exploration in the science of life enlarges our trust. All the hard laborers in the order are animated by the amplitude of organic science. The spirit of adventure is now bold and daring. Past discoveries sharpen the desire for more. No frontier-man has ever reported that there is nothing beyond him, but the reverse, a limitless area. Into this range the hardy, tough intellect plunges. Hence the progress of this age, also the interest in him who passes his fellows, who cares not for trail, nor spotted trees, but is able to cut his own path, become his own guide, and observe for himself, even in the unknown, where mortal before never entered. This is the intrepidity that many students of man possess, who are now enlarging the domain of knowledge, hastening the downfall of sham, and introducing the reign of reason. To those who felt

the stinginess and narrowness of present possession, who believed in the abundance of the undiscovered, who chose effort, and rushed into the very presence of mystery; are we to day indebted for all the achievements in science. What a harvest from so few laborers! What rich results from the free brave mind!—What an excitant to emigration from a thing to a man! to the unriveting, and unforging of the chains of tyranny, idleness, and unconsciousness! Because of such members in our order, our profession has emerged from Cimmerian night to the forenoon of day.

¶ The coming student must be convinced of the sufficiency of our philosophy. The science of life must receive his unbounded confidence. His faith here should be parallel with that in gravitation for the moving of a free body. Belief in its totality is demanded. With him it must not lack in atom. His future progress will be in the ratio of confidence. Assent to the wholeness of nature as exhibited in man, is not enough, conviction and ardent espousal are required. Upon the threshold of this old brotherhood, the aspirant to its lore and honors, should be baptized in the full adequacy of life when known, for robustness and self-preservation. Let the new comer take this to his mind as he takes food to his flesh. It must live with him; after its rational establishment, it will come unbidden from the tongue of intuition, and then its loss would be impossible, it becomes an actuating sentiment, urging one to deeds of worth.—The importance of this trust can not be overestimated; excess here is impossible. As well might the husbandman over value seed-time; the legislator patriotism, or the jurist, justice. Yet, the majority lack it. Teacher, practitioner, and student are often infidel to it. The assumptions, officiousness, and wise airs of Panacea, allure them, so much so, that this cardinal belief—and a spontaneous one to the rational mind—is not, in the main, an actuating one. Investigation will be in proportion to the estimate of the subject; and the guiding hand of remedial means as well as prevention, is organic philosophy. Even granting that the great Healer is to visit us, then his power will lie in profound attainments in our organism, for then as now, remedy must antagonize error, and fraternize with right, which calls for what, when, where, and how much.

Subsequent to the establishment of an unfaltering confidence in our science, on the part of the student, should follow energetic well directed effort for its contents. Faith here is but a means to an end. The circle of our chairs embraces studies that are not only fit for the acquisition of students, for the appreciation of tyros, but proper for the taxation of the powers of the graduate yes, altogether worthy of the abilities of the hoary practitioner. The bane of the profession lies in its members becoming superior to study—in restricting science to boys—in the physician living on the mere husks of practice. We may, for the sake of a degree, spend two and three years in drinking at the sources of truth, but we soon nauseate at the draught, and we turn for something that will feed habits of inflation, vanity, and sloth. 'Tis easy for us to say that the weighty and pressing duties of business, consume all our time, that we have none to spend in speculation. Our scientific volumes soon slide off from our tables, and we thereafter associate them with the dim recollections of school days.

And here is our foe, in the unstudious, unreflective, unobserving habits of physicians. The profession lacks men. In beings it is overrun. The things that we have are numberless. If marshaled like soldiers, the outsider would award to us great strength. But in stout, robust, indomitable students, we are alarmingly wanting. A new breed is called for, the old stock is not worth a single wintering; its blood, like the taint of tubercle, is consuming. This species of our genus has outlived its time. Like the barren tree, its room is more important. The spirit of genesis has departed from it. It encumbereth the order; sterility is in its members. It evinces no sign of child-bearing. The science of the profession in such a wedlock, better remain in virginity, at least demand a divorce, and declare for a free-love. Propagation is expected from him who espouses our cause. To all should be said dismemberment, or offspring. A passport to the brotherhood should be the power of generation, to give birth to the child of progress, to beget observation, to bring into being will, and to rear it to the stature of a sovereign, to animate inference, and to quicken with life induction.

The mind has its table-lands, and its fen-lands. From the latter are ever rising the miasm of caste, party, bigotry, and

domination. Upon the former shines the light of truth, and gathers the air of freedom. The residence of mental aristocracy are there, so are the observatories of science. The occupants of these salubrious heights are the children of labor, of contempt for mediocrity, of passion for struggle, of hate for tyranny, of pride for capacity, of indignation for emptiness, and of enthusiasm for nature. The home of benefactors, philosophers, and enlarged scholars is here. Among them are seen no random prescription, no blind precipitous zeal, nor pounds for breachy intellects, but accuracy, definiteness and manliness.

The profession is not poor in numbers, but indigent in honorable ambition. The pride of its members like the thymus gland has dwindled into sightlessness. The undaunted intellect, the shame of imitation, the disgrace in never arriving at manhood, the pusillanimousness of plagiarism, the childishness of locking up the brain and hiring thought done, the weakness of riding at another's expense, or request, do not sufficiently bestir us. To shine by the splendor of one's own burnished intellect, to read the word in its vernacular, to despise shadow, to feed on substance, to alter and make circumstances, to banish reverie, to resurrect the will, to bid thought, to rule self, are not characteristics of laggards, mountebanks, tools, nor bigots.

Perception in the concrete, memory, unbridled imagination, animal consciousness, guessing, assertion, and loquacity, are not costly products. They flourish spontaneously. They resemble the wild growth of the forest. One can have them without ever rising with the sun. They are the comrades of idleness, buncombe, vanity, and pretension. But exact observation, specific attention, irrefragible postulates, rigid inferences, obedient thought, and catenated speech, are not the fruit of lounging, nor wishes, nor party, but of resolution, purpose, and toil. The undisciplined, unbridled mind is a wilderness, rank with products, which requires the transmuting hand of culture. And when thus husbanded, it is prepared to explore science, to become the patron of philosophy, and to augment happiness. It is this exaltation above fitful thinking, of gushing feeling, of wild fancy, and of headlong asseveration, that we want. Blind guides, by their sophistry, would convince us that we are dying because of ignorance of a certain mineral, herb, theory, or their sage instructions.

To all, we say; Science as it is in the human constitution, confidence in their capacity to acquire it, and ceaseless effort for its boundless treasures.

I care not for the wranglings, divisions, persecutions, poisons, specifics, quacks, nor bigots, nor do-nothings of the profession, provided the student is married to organic science, provided there is a plastic force in his will, provided the morass of thought has been ditched, drained, and its rich loam exposed to light, heat, air, and dew. Instead of sectarianism, and pet theories that can never leave the lap that dandles them, let us work for the enthronement of man upon himself—of will, let us install that divine sovereign. Our students only want this Jove of the soul to peer through voice, feature, and gesture. This is the right they want protected inviolate. And by one their cause shall receive his undivided support. Unfurled canvas, filled with the luckiest breeze, is not more advantageous to the movement of the ship, than a free, conscious will is to the intellect.—Let a student once feel this inspiration—let his mind once be conscious of himself as its master, and all the trammels in tyranny can not bind him. Sectarianism may require popes and creeds, but he will despise them. Free agency is his boast and glory, while fatality—a tool in the shape of a man, he spurns as he would treason.

The noblest feature of the reformer is his independence, his originality, his actual going to the sources of philosophy and interrogating them for himself. No hitching strap noses him about. He indignantly snaps every fetter, as an outrage to man, rises bodily into manly pride and self-dominion. But the ignoble feature of the reformer is his perfidy to self-hood—his intolerance. In most instances he forges chains more intolerable than those from which he escaped. No matter how correct our views, their enforcement upon another is fraught with immense mischief, and in this lies the deadly upas of the profession. It is gigantic in evil. It blasts for time, if not for eternity, the manliness of the student, and by inches dies because of his barrenness.

Little minds, the contents of whose mugs they suppose comprise all that is possible, when they are elevated to a position in our colleges, consider nothing so important to the profession as college training. These institutions are not indispensable,

they are but conveniences for students. They should, and do, ordinarily, possess facilities for instruction, that are not found with private individuals. They may be of great advantage to the seeker after science. But the mind that thirsts for knowledge as the parched earth does for rain, will gather it from every object on the open page of nature, and retiring within itself, by the growing lamp of consciousness, will read there more than college halls contain. The intellect once set on fire—once pervaded by unfaltering attention, will receive an impetus that nothing in art or nature, can stop. The orbs of space are no more sure to follow their old paths, than the self-possessed mind is to pass from hope to fruition, from faith to knowledge, from weakness to strength, and from obscurity to celebrity.

YELLOW FEVER.—According to a statement recently made in the *Gazette Medicale*, the yellow fever may be prevented in the majority of instances by previous inoculation with the diluted virus of a reptile. The statement is made by Dr. LUCIEN PAPILLAND, who, at the period of announcement, had performed no less than 2477 inoculations on persons living in districts ravaged by yellow fever, and with the most satisfactory results. Only 288 or 10 per cent. of the number inoculated were subsequently attacked by yellow fever, though exposed to its influences; 68 of the total number, or $2\frac{1}{2}$ per cent. died; and 2247, or 90 per cent., were altogether protected. Dr. PAPILLAND calculates that no less than 16 per cent. of the total population of a region infested by yellow fever may be preserved by his mode of preventive treatment. The history of the discovery is not a little singular. Some time since Dr. F. HUMBOLDT announced the fact that the inhabitants of Central America were liable to be bitten in the feet and legs by a reptile of undetermined species. Many died in consequence, but those who survived remained singularly free from the ravages of yellow fever. M. PAPILLAND inoculates with the diluted poison of the reptiles, which he irritates, until it bites a piece of sheep's liver, and the juice of the latter thus impregnated is the material employed for inoculation.

Editorial.

PROSPECTUS OF A WORK ON BODY AND MIND.

BY

DR. E. H. STOCKWELL.

THE author of the proposed work has been engaged for the last ten years in lecturing to medical classes upon Anatomy, Physiology and Pathology, especially upon the Brain and Mind.

The various classes that have honored him with their attendance upon his lectures on the higher departments of the science of life, have repeatedly solicited of him the publication of them.

Because of the estimate placed upon these Lectures by his students, the great importance of the subjects discussed, and a belief that they may throw some light upon the hitherto hidden portions of human science, the Author is induced to publish them—to add his mite for the enlargement and enrichment of science, and especially of his cherished profession.

Because of the folly of teaching Medicine for comparatively nothing as has been the practice for years in Cincinnati, the students of the Author, well know, that abundance in a pecuniary sense can not be his boast.

Therefore he has induced to throw out this Prospectus to his friends and to the lovers of the nobler sections of the science of life, and to offer to them who will ADVANCE ONE DOLLAR prior to its publication, a copy of the volume when published. The price of the work after its issue will be TWO DOLLARS.

The assurances that have been given to the Author by his friends, justify him in the opinion, that the above announcement will be responded to by his friends with sufficient promptness and liberality to enable him to publish the work without embarrassment.

To each one of his thousand students, will be sent this Prospectus, and a reply from each, as soon as practicable, is very respectfully solicited: For them the Author has spent time, means and his best energies. And now he goes to them for this favor.

By October next the work will be published and ready for issue.

CONTENTS.

The Body is fleeting; The Body is a Machine; The Body is a receptacle of Life; The Body is a Receptacle of Mind; Volition; Muscular Action; Nervous Action; The Senses are Receptacles of Nature; The Medii of Nature to the Mind; Is the Brain the Mind; Is the Functions of the Brain the Mind; Man is Dual; Link that joins Body and Mind; The Mentality and Vitality of the Body; The Sick Man's abiding Friends; The Cerebrum; Its Size; Its Elements; Its Power; Its Intensity; Temperament; Mental Diagnosis; Bodily Death; Abnormal States; The Soul; The Mind; The Intellect; The Will; The Sensibility; Perception; Consciousness; Intuition; Ideality; Reason; Memory.

Any Journal or Paper, that will notice this Prospectus will receive by mail free of charge, a volume of the publication. The Macon, Memphis, Palestine, Cincinnati, New York, and Melville Journals will do the Author a great favor by calling the attention of their readers to this work.

All correspondence directed to

E. H. STOCKWELL, Cincinnati Ohio.

LOCAL TREATMENT OF BURNS.—Dr. SMITH, in his new work on the practice of surgery, recommends the application of cold water, when the burn is only superficial, sometimes adding sugar of lead, opiates, &c., as indicated. When there is vesication, raw cotton, carded, may be applied; or the *linimentum calcis* spread on rags. Glycerine is used in the same way. Flour is highly serviceable, but is not applicable in cases of free suppuration, as the pus mixes with the flour, and makes an inconvenient crust. Powdered chalk is used in the same manner as flour. White lead ground in oil, or collodion may be used as a coating, but the stimulus of the ether in the latter gives severe but momentary pain. In severe burns where there must be sloughing, warm water dressing from the first moment is highly approved. Poultices are objected to as they are heavy, become rancid, interfere with cleanliness, adhere, and become receptacles of pus. The Kentish ointment, made by incorporating oil of turpentine with common basilicon, is perhaps the best of all dressings for deep seated burns, as they always require excitation. The important indications are, exclusion of the air, moderate stimulation, and prevention of adhesions and contractions in the formation of the cicatrix.

PROPHYLAXIS OF PUERPERAL CONVULSIONS.—M. PIEDAGUEL, one of the physicians at the Hotel Dieu, in Paris, recommends strongly the administration of quinine and sub-carbonate of iron to lying-in women who are exposed to the contagion of puerperal fever. He prescribed eight grains of the former and thirty of the latter daily, in divided doses, to every woman who entered his wards. During 68 days he had under his charge 51 patients. Of these, 11 had the early symptoms of the disease, which did not continue; 1 came in from another hospital where she was delivered, with the fever, and delirious; she died in two days. This was the only case which occurred in the wards.—During thirty-eight days, another series of forty women were subjected to the same treatment. Of these, fifteen had slight symptoms; two were severely sick; one died, of puerperal fever, with peritonitis and effusion into the thorax. Thus out of ninety-one women, only one died of puerperal fever contracted in the wards.

TREATMENT OF CONSUMPTION.—Dr. RICHARDSON, physician to the royal infirmary for diseases of the chest, has published a paper entitled, “Outline of a hygienic code for the treatment of consumption,” in which he gives the following rules, as applicable to the premonitory stage, the stage of tubercular deposits, and the next stage, “when the local mischief is much further advanced.” We have only space to give the rules, without the explanatory remarks.—1. The supply of pure air for respiration is the first indication in the treatment of the consumptive patient. 2. Active exercise is an essential element in the treatment of consumption. 3. A uniform climate is an important element in the treatment of consumptives. 4. The dress of the consumptive patient should be adapted to equalize the temperature of the body. 5. The hours of rest of the consumptive patient should extend from sunset to sunrise. 6. The occupation of the consumptive patient should be suspended if it be in door or sedentary; but a certain amount of out-door occupation may be advantageous. 7. Cleanliness of body is a special point in the treatment of consumption. 8. Marriage of consumptive females for the sake of arresting the course of the disease by pregnancy is morally wrong, and physically mischievous. 9. The diet of consumptive patients should be ample and should contain a larger proportion of the respiratory elements of food than is required in health. 10. The medicinal treatment of consumption should in the main be of the tonic class. There is no doubt, as Dr. RICHARDSON says, that the public expect to be cured by pills and plasters, and not by a series of instructions tending to bring men into obedience with the laws of nature. In this country the main reliance is apt to be placed upon quack nostrums, charms, and placebos, under the direction of the unprofessional persons and charlatans, and in violation of the laws of both nature and science.

ACNE ROSACEA. (MORRIS, in *London Lancet*.)—Pulverize one drachm of champhor with alcohol, add twice the quantity of milk of sulphur, then a sufficient quantity of distilled water, to render the mixture liquid for use. With the finger smear this lotion freely over the face at night, and more sparingly in the morning; the effect is generally soon apparent, and is often most striking.

ENTROPIUM OR INVERSION OF THE EYELID.—H. WALDON of the London Ophthalmic Hospital, regards as the cause of this disease, an unnatural action of that portion of the orbicularis palpebrarum muscle, which covers the tarsal cartilage, which is thicker, redder and stronger than at any other part. As an evidence of the correctness of this theory, he cites a case that can at will invert the eyelids, also cases that were treated by dissecting up the marginal portion of this muscle.

INK FOR STEEL PENS.—R. Logwood, rasped, lbj; yellow chromate of potash, grs., lxxij; water, qts., vj. Boil the logwood in the water until it is reduced to four quarts, strain and add the chromate of potash. This ink does not corrode steel pens, or become encrusted upon them, and writing made with it may be washed with water, or submitted to dilute acids without injury. The author of this recipe says he has used this ink for two years without renewing his steel pens.

TREATMENT OF BUBO.—By M. BROCA. Bubo has two stages of development. In the first stage the engorgement is confined to the gland. In the second stage the engorgement is propagated to the adjacent tissues. By the second, the ravages of bubo are caused. The object of the physician should be to prevent the second stage. Bubos are of two kinds, viz., the *local* suppurating bubo, and the indolent *constitutional* bubo. The latter is one of the first facts of secondary syphilis which follows indurated chancre; the former appears in a gland that is in direct communication with the part that is the seat of the chancre, which is never indurated, and never gives rise to constitutional syphilis. The constitutional bubo is indolent, while the local is always painful. There are generally many of the former, while of the latter there is one or two, and they near each other. The constitutional is hard, the local less so, and imparts a sense of fluctuation. He punctures the local bubo in its first stage, freely, to allow a free exit of the engorged matter, and applies a tepid cataplasm.

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LECTURE ON PUERPERAL FEVER.

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GENTLEMEN: In my last lecture, I stated briefly the evidence and facts which favor the views that all the different forms and manifestations of puerperal fever depend on a specific poison, arising in some instances sporadically; in others, prevailing epidemically; sometimes due to the zymotic influence present in erysipelas, typhus, gangrene, surgical fever, and some other diseases; communicable from patient to patient by the attendants; and whose earliest known effect is a disordered state of the blood of the childbed woman. I now proceed to describe the different secondary disorders traceable to the puerperal poison.

In the adynamic form of puerperal fever, the effects of the poison are seen in their most terrible and virulent form. This type of the puerperal disease has prevailed in the most ravaging epidemics, and also in those outbreaks in which the contagious spread of the disorder has been most demonstrable. Occasionally, patients have been struck by the disease during the course of labor, or within a few hours after parturition. In other cases, two or three days have elapsed before the invasion of the disease. In the worst cases, patients become at once delirious or lethargic, the pulse being very rapid, from 120 to 140 in the minute, and feeble. Occasionally, acute pain is complained of, but more frequently there is in the worst cases little suffering beyond a feeling of indescribable anxiety and depression; sickness and vomiting of coffee-ground matter sometimes distresses the patient.—

The countenance is commonly sunken and dusky, or deeply pallid, with the dark circle round the eyes strongly marked.—The skin is not above the usual temperature, but covered with clammy perspiration. Tympanitic distension of the abdomen rapidly supervenes. Rigors or shiverings may or may not be present. There is little or no sign of reaction, and in the worst cases the patients die in a state of collapse within a short time from the first seizure. Of 88 cases recorded by Dr. COLLINS, death occurred in 2 cases in 24 hours, in 1 in 27 hours, in 1 in 36 hours; 9 died on the second day, and 15 on the third, so that 24 perished in less than 72 hours. Dr. RAMSBOTHAM states, in the worst cases this disease is more rapidly fatal than any other disease met with in this country, except cholera. Mr. HEY mentions a case in which death followed in less than eighteen hours.

When, from the less virulent action of the poison, or the strength of the patient, the disease is more protracted, the same symptoms are present, but in a milder form and degree. The invasion of the disease generally begins on the second or third day, and is commonly ushered in by shivering. There is in the earlier stages increased heat of skin. The tongue is sometimes coated, at others red; but, as happens with every variety of puerperal fever, cases are sometimes met with in which, from the commencement to the termination, the tongue remains tolerably clean. The prostration is less profound, and there is pain in the abdomen. Profuse sweating is a very common and distressing accompaniment of the disorder. In some cases this is so strongly marked, and constitutes so large a part of the disease, that Dr. BLUNDELL described it as a distinct form of puerperal fever, under the name of hidrosis. The sweat and the breath are very often accompanied by a sweetish pus-like odor. The sweating of puerperal fever does not diminish the secretion of urine, nor does it abate the quickness of the pulse. An intolerable thirst prevails, and the patient drinks immense quantities of whatever fluid she may be allowed. Dark spots, or ecchymoses appear upon the wrists or other parts of the body. After two or three days, profuse diarrhœa occurs, but though it often appears to be critical in its nature, it brings little or no relief, and the patient is harassed by frequent dejections and vomiting. The lochia are commonly but not invariably suppressed. More fre-

quently, the breasts become flaccid without secretion; but this is not always the case. The pain is often intermittent, even in cases where it is most severe, sometimes giving the attendants and the medical practitioner the hope that it may be of the nature of after-pain. In some of these cases the mind is remarkably clear, until toward the termination of the disorder. One of the most constant and distressing symptoms is tympanites. This comes on more rapidly, the more acute the disease may be, and soon rises to such a height as to interfere with the action of the diaphragm and heart. The patient may, in a few hours, become larger than she was before delivery. Considerable quantities of flatus may be discharged, but no diminution in size is perceptible, the distension appearing to depend on an immense secretion of air by the mucus membrane, with paralysis of the muscular coat. In the course of the disease, obscure symptoms of uterine inflammation, with enlargement of the organ, or of peritonitis, pleuritis, or pneumonia, are met with. When the disease proceeds to a fatal termination, the patient succumbs to exhaustion, the action of the heart becoming more frequent and feeble, congestion of the lungs, or effusion into the pleural or pericardial cavities takes place, and low delirium or coma is present for some time before dissolution. In the rare cases, which terminate favorably, sweating, purging, or diuresis, appears to relieve the patient, and she slowly recovers from a state of great debility, remaining long afterwards in a condition of extreme debility both of mind and body. In comparatively rare cases, the chief symptoms of the disease are gastric, bilious, and enteritic irritation, but these are amongst the more favorable forms of puerperal disease.

The morbid changes met with after death are very various. In the most rapidly fatal cases nothing has been met with beyond non-coagulability, thinness, and blackness of the blood. The blood in these cases resembles that of persons killed by lightning or hydrocyanic acid. There may be no signs whatever of any local inflammation, or disease of the uterus or other organs. In the less virulent and more protracted cases, purulent infection of the blood has been detected, and pus has been found in the veins and other structures of the uterus. Congestion of the lungs, gangrenous abscess of their organs, or effusions of mixed pus, serum, and lymph into the pleuræ, have been observed. In some

cases, spots of ulceration in the stomach and intestines, or purulent collections in the liver and kidneys, are recorded. Abscesses in the omentum have been frequently found, so have effusions of sanious pus and feebly organized lymph in the peritoneal cavity, particularly about the uterus and its appendages. The internal surface of the uterus and the muscular structure have been found softened and in a state approaching to gangrene, particularly the posterior part of the organ.

It has been mentioned that sporadic cases of puerperal disease are sometimes caused by the absorption of sanious lochial discharges, or the decomposition of coagula or portions of retained placenta within the uterus. There is also another mode in which sporadic puerperal fever may occur. There is some peculiarity about the state of constitution which obtains in pregnancy and parturition, tending to assimilate numerous other affections to the puerperal type. It may be seen, that in the case of a healthy pregnant woman attacked with small-pox or scarlatina, before abortion or premature labor is produced, the disease begins to assume the puerperal type. At any other time than after parturition, the presence of putrid matter in the uterus does not excite any great constitutional disturbance, as witnessed in the case of polypi removed by ligature. Any inflammation of the os or cervix excited by a difficult labor, or peritonitis caused in the first instance by the violent contractions of the uterus, has a strong tendency to run into puerperal fever. After the Cæsaræan section, the patient suffers from an almost exact likeness of puerperal fever. Dr. SIMPSON very ably draws a comparison between puerperal and surgical inflammations and fevers, and refers this similarity to the resemblance which exists between the uterus after labor and a wound after a surgical operation. No doubt this is true, to a great extent, particularly as regards the occurrence of phlebitis. But there is in the pregnant and parturient woman a state of constitution which predisposes her to the formation of some virus or poison, capable of producing the puerperal type even before delivery, or even before the commencement of labor. This is the case after mechanical injuries of the gravid uterus. It is observed, in cases of peritonitis, pleuritis, or any other visceral inflammation occurring during pregnancy.—

Before the uterus has been excited to expel its contents, there is an approach to the peculiar puerperal type of disease. If a gravid woman be attacked with erysipelas, she suffers from the symptoms of puerperal fever or inflammation before the birth of the child, and the infant may, when born, be affected with erysipelas, and die within a few hours after birth. Thus, then, it seems capable of demonstration that, apart from the state of the internal surface of the uterus after parturition, and especially that part of it from which the placenta has been separated, there is in the habit and constitution of the gravid woman, some peculiarity which, under numerous circumstances, produces the virus or poison which gives their characteristic to the multiform varieties of puerperal inflammatory and febrile disease. Amongst the predisposing causes of puerperal fever in any of its forms, anxiety of mind and depressing emotions during pregnancy, or at the time of labor, hold a very prominent place. This is strongly insisted on by Dr. FLEETWOOD CHURCHILL and many other writers.—Undoubtedly this cause is a main agent in the production of some of the sporadic causes of this disease. Dr. CHURCHILL observes: “Several of the worst cases I have seen were mainly attributable to this cause.”

In many cases of puerperal fever, peritonitis of a more or less acute form constitutes the chief part of the disease. In some epidemics, inflammation of the peritoneum has been so universal as to give rise to the opinion that peritonitis formed the essence of puerperal fever, and puerperal peritonitis and puerperal fever came to be used as almost synonymous terms. This was very much the state of medical opinion up to the time when GUTHRIE, BOUILLAUD, and Dr. DAVID DAVIS initiated the doctrine of phlebitis and purulent affection of the blood, so ably and laboriously worked out by Dr. ROBERT LEE. Recent outbreaks of the disease have not manifested the peritonitic type so strongly as previous epidemics, but, cases not unfrequently occur, in which the peritoneal disorder is the chief local manifestation of the disease.

In puerperal peritonitis, or fever with peritoneal inflammation, the disease usually commences within two or three days after parturition, and seldom longer than a week after labor.—Cases are on record, in which it has commenced before the beginning of labor, or during the course of parturition. I have

already referred to the influence of contagion and infection in producing this form of disease. Patients with easy labors, and without a sign of inflammatory disorder, may have puerperal peritonitis as the result of contagion or infection, when exposed to erysipelas, gangrene, or any of the disorders mentioned in connection with the production of puerperal fever. It may also arise from injury of the peritoneum during the course of violent labors, or from exposure to cold. When caused in these modes, it is almost universally converted into the febrile puerperal type. In some cases, it is an extension of disease from the parietes or internal surface of the uterus, and in others it is a result of uterine phlebitis. The disease may involve the whole peritoneal membrane, or it may be localized in the neighborhood of the uterus, Fallopian tubes, and ovaria.

The symptoms of puerperal peritonitis are generally in stronger relief than the symptoms of any other form of puerperal fever. Tenderness, pain, and exquisite sensibility of the abdomen to the touch, particularly in the neighborhood of the uterus, is generally observed. Yet pain is not always present. On the contrary, it is entirely wanting in some of the most rapidly fatal cases, and where post-mortem examinations have proved peritonitis to exist. Dr. FERGUSON found that out of 173 cases, this symptom was absent in 19. The pulse is invariably rapid, remaining throughout the course of the disease at from 120 to 140. This is the symptom which in every variety of puerperal fever never fails of expressing truly the condition of danger. It has often been remarked, that whatever the other indications may be, the puerperal woman is never safe whose pulse rises steadily above 100. In puerperal peritonitis, the pulse is quick from the termination of labor, and it has been observed that where the disease is threatened, the subsidence of the circulation, which is natural after labor, does not take place. This rising of the pulse is the earliest symptom of peritoneal inflammation. Before the commencement of pain, rigor or shivering almost invariably occurs. Sometimes it does not amount to more than a prolonged creeping over the surface of the body; at others, it is so marked that the teeth chatter, and the patient asks to be held in bed, so violent is the muscular shuddering. While the rigor is most distressing, the surface of the body is little, if at all, below the natural standard. The state of

the tongue is variable—sometimes red at the edges, with a white streak in the center, at others coated and red, and sometimes without much decided alteration from the natural state. When the other tissues of the uterus are involved, this organ is swollen, and can be felt distinctly and painfully, until the rising tympanitis disguises it. There are cases in which the uterus attains a very large size, after having contracted, subsequent to labor. The tympanitic distension which ensues is often very great, and the swelling of the abdomen is further increased by effusion of seropus into the cavity of the peritoneum, when the surface acquires a peculiar doughy or boggy feel. Sickness is very constantly present in this disease, and adds greatly to the suffering of the patient, from the compression of the abdomen by the efforts at vomiting. Dysuria is complained of, and the urine is scanty and high-colored. As the disease progresses, purging commonly supervenes, the motions becoming dark and offensive toward the last. Throughout, the breathing is short and painful, and cephalalgia is often present. Beyond this, the brain is frequently unaffected until the close of the disease approaches. The physiognomy is from the first distressing and pinched, so as to be almost of itself characteristic of the disease. No one who has ever seen the disease can mistake the indications afforded by the countenance and the pulse. The dark areola surrounding the eyes, the dilated pupil, the glassy surface and bloodless conjunctiva, give a lustrous and unearthly appearance to the eyes in all cases of puerperal fever, whatever the special complication, when the disease is fully formed. Occasionally in this disease there is an appearance of the sudden transference of disease to the pleura, and, more rarely, to the serous membranes of the brain. When the peritoneal inflammation is chiefly limited to the uterus and its appendages, the symptoms are somewhat less severe, and the pain more local, than in general peritonitis, being felt most distinctly in the iliac regions, and sometimes on one side only. With the local peritonitis, there is generally inflammation of the broad ligaments, the sub-peritoneal cellular tissue, the Fallopian tubes, and the ovaria. Suppuration and abscesses sometimes form in these structures, and in the most favorable cases, either burst spontaneously on the surface of the lower part of the abdomen or into the vagina or rectum, or they sometimes admit of puncture and arti-

ficial evacuation. A fatal result is almost invariable when pus is formed in any considerable quantity upon the peritoneal surface.

The pathological changes consist of effusions of pus or of lymph, rarely so highly organized after ordinary peritonitis, seropurulent effusions and abscesses of the surface of the uterus or its appendages, or of the omentum. In many cases, the uterus is found diseased, the inflammatory disorder having extended from the uterus to the peritoneum, or, in some cases, from the peritoneum to the uterus. Softening of the parietes, patches of gangrene, abscesses in the walls, and collections of pus in the veins of the uterus are met with.

One of the greatest, if not the greatest, advances ever made in the pathology of puerperal fever consists in the knowledge we have obtained, in recent years, of the existence of uterine phlebitis as a very common and destructive form of puerperal disease. The occurrence of uterine phlebitis and suppuration of the veins in isolated cases had long been known, but no other inquiries, as far as I am aware, have at all equaled the researches of Dr. ROBERT LEE, in this particular department, and it is to his extended investigations that we chiefly owe the establishment of the doctrine of uterine phlebitis as it occurs after parturition. Others have, as I believe, with truth, controverted Dr. LEE's views of the entire dependence of puerperal fever upon uterine inflammation and phlebitis, and it may, I think, be shown, that where phlebitis exists, it is, in almost all cases, an expression of constitutional disorder, and especially of a poisoned or diseased state of the blood, rather than an idiopathic disease. The researches of Dr. FERGUSON, and others, prove that puerperal fever may destroy patients before there has been sufficient time for the occurrence of phlebotic inflammation, and that in such cases no pathological changes beyond a diseased state of the blood are met with. Many facts in the history of puerperal fever prove that before the purulent infection of the blood, believed by SCANZONI and others, to constitute the essence of the disease, has taken place, changes have occurred in the circulating fluid, which may, in some cases, destroy the patient long before the suppurating stage has been reached. The experiments of Dr. MACKENZIE, and the cases he has collected, show that healthy obstructive inflammation of the veins, the result of simple traumatic injury, does not result in purulent in-

fection of the blood, but that a morbid state of the circulating fluid is necessary to the production of pyæmia.

Uterine phlebitis generally commences on the second, third, or fourth day after labor, with shivering, or rigor and a marked increase in the quickness of the pulse, which ranges throughout from 110 to 140 and 150. there is usually pain in the hypogastric, or one of the iliac regions, the pain becoming more evident upon deep pressure. There is also pain in the back, or in one or both hips, extending downwards to the thighs. The pain is generally intermittent, and is sometimes absent for many hours.—The patient is usually anxious to be quiet, every movement of the body greatly increasing the pain when this symptom is present. But in a considerable number of cases the pain alone is not so considerable as to indicate the dangerous state of the patient, and in some instances it is absent altogether. The lochia may become offensive at the commencement of the disorder; they may be scanty, or they may remain in normal quantity and quality. The mammary secretion is usually suspended; but in some cases it continues until the patient is exhausted by the progress of the disease. The perspiration is very distressing, and constant, and after three or four days from the commencement of the attack, diarrhoea is generally present. At intervals, throughout the course of the disease, violent rigors are felt, which may be supposed to make successive formations of pus, or the commencement of inflammation in other organs beside the uterus. The state of the tongue is very variable, and it may be red and glazed, covered by a creamy fur, or scarcely altered from the natural state. The complexion of the patient is at first little altered, except by the presence of a hectic spot on each cheek. The mind is clear, but the speech and movements of the patient are tremulous. The patient often sleeps tolerably well, and frequently expresses herself as feeling better; but her manner is anxious and trembling, thanking those about her so nervously for the slightest attention, that her state in this respect has often been compared to the incipient stage of puerperal mania. The tympanitic distension of the abdomen is not the least distressing symptom, giving rise to hiccup, vomiting, and greatly interfering with the respiration and the action of the heart.

As the disease progresses, the secondary phenomena of uterine

phlebitis and the formation of pus within the veins become evident. The patient complains of pains in some joint or joints; swellings appear in the neighborhood of the articulations, and erysipelatous blushes appear on the skin in different parts of the body. The hips, knees, shoulders, and elbows, are the joints most commonly attacked. Large suppurations in the vicinity of the joints occur, or patches of slough or gangrene form at the sides of the erysipelatous blushes. Sometimes the secondary inflammation attacks the eye, especially the left, leading to rapid destruction of the cornea. These external suppurations, however painful and exhausting, are considered somewhat in the nature of crises, and as giving some faint hopes of recovery. Up to this point, up to the time in fact when external suppuration begins, it is acknowledged by the best authorities that we have no positive signs by which we may be sure of the existence of phlebitis.— This is stated with great candor by one of the latest and best writers on the subject, Dr. McCLINTOC, of Dublin. In other cases, the secondary inflammations and suppurations are internal, and attack the lungs, liver, kidneys, omentum, or other organs. These complications are more dangerous than the external secondary abscesses. These phenomena can not exist without the pyæmia of which they are the results, indicating its constitutional effects. When pus is present in the veins, the inflammatory symptoms subside to a considerable extent, and adynamic or typhoid symptoms manifest themselves. It is necessary, however, to distinguish between the low state of system thus produced and the somewhat similar condition which exists in the first instance, when the puerperal virus is very potent, and before any inflammation or suppuration has progressed in the veins. When patients recover, they slowly struggle through the exhaustion produced by the extensive suppurations, and many remain blind or with ankylosed joints to bear witness to the terrible ordeal through which they have passed. When a fatal result ensues, the patient dies with symptoms very similar to those described, when speaking of the adynamic form of puerperal fever, or exhausted by the discharges consequent on the external suppurations.

The tendency of the puerperal and other forms of pyæmia to attack the joints, is a very remarkable feature of this affection. Large effusions of pus and sero-purulent fluid are poured out in

the joints affected, and the cartilages are often eroded and destroyed to a remarkable extent. No explanation has been given of the reasons why the joints, the eyes, or the serous membranes should be especially selected. I would suggest the probability, that this selection may depend on the nourishment of parts of the eyes, cartilages, and serous membranes, by the non-vascular permeation of the tissues by the liquor sanguinis, as explained by the researches of Mr. Toynbee. The diseased liquor sanguinis, or the liquor puris, in purulent infection of the blood, may easily be supposed to affect especially those tissues of the body, in which special provisions exist for their permeation by the colorless parts of the blood. One of the earliest, as well as one of the most graphic descriptions of puerperal affections of the joints, we owe to Mr. COULSON, who has described the dissection of numerous cases of this kind.

Besides uterine phlebitis, other forms of puerperal inflammation of the uterus occur. That which affects the lymphatic vessels does not materially differ in symptoms, progress, and termination from phlebitis. Inflammation of the muscular tissue and lining membrane of the uterus is characterized by great disturbance of the nervous system, distressing cephalalgia; and is attended by fever of low type. Occasionally the cerebral symptoms are so intense as to entirely mark the uterine disease. It is ushered in by the same symptoms as regards rigors, acceleration of the pulse, and state of tongue as those which attend the other varieties of puerperal inflammation. Its tendency is to produce softening, suppuration, and gangrene of the substance of the uterus, and it is one of the most fatal of all the puerperal inflammations.

Before speaking of the treatment of puerperal fever in its varied forms, it can not be too much insisted on that it is a disease, almost above all others, open to *Prevention* rather than *Cure*.—The avoidance of injuries of the uterus or vagina in difficult or instrumental labors, the entire removal of the placenta, and the promotion of a free lochial discharge, with the avoidance of the possibility of inoculating or infecting the puerperal woman with any of the poisons which admit of conversion into the puerperal poison, are of the greatest importance in preventing the appearance or extension of this terrible disease. As regards the actual

treatment, nothing can be more different than that which has been most successful, or best borne in different epidemics, and at different places and times.

The opposite extremes of puerperal fever—namely, the peritoneal and inflammatory, and the adynamic—are those which most distinctly admit of positive rules of treatment. In puerperal peritonitis, copious venesection, the free use of leeches, mercurials, opium, fomentations and stupes, or warm poultices to the abdomen, counter-irritation, and mild aperients, are the means upon which we must depend. The bleeding must, however, be prompt, to be of service, and its extent must be measured by the powers of the patient and the intensity of the disease. A full bleeding to twenty or thirty ounces at the outset of the disease, will do more to relieve the patient than any subsequent treatment. She should be bled in the upright position to incipient syncope, and the bleeding should be repeated in a few hours, or the abdomen covered with three or four dozen leeches. At the same time, calomel with opium, or Dover's powder, should be given in repeated doses, at small intervals, with a view to the production of ptyalism, or mercurial inunction should be resorted to. When general and local blood-letting have been carried as far as the patient will bear, and when the disease continues, a large blister over the abdomen, is of great service. In all cases of puerperal peritonitis, there comes a time, unless the patient has been rapidly destroyed, in which stimulants are required, and this time comes much earlier in puerperal than in ordinary peritonitis. It is only in the most acute forms of puerperal peritonitis, that such an active plan of treatment, as that now indicated, is admissible. In peritoneal disorders of a lower type, depletion must be more sparingly employed, and a tonic plan earlier resorted to.


In the most adynamic cases of puerperal fever, a stimulating treatment must be adopted from the first, and wine, brandy, ammonia, and quinine are required. The only antiphlogistic remedy that can be resorted to in such cases, is blistering. In milder, or more mixed cases, a small bleeding at the very commencement is sometimes called for, or the application of a few leeches, but as the patient passes rapidly into the low stage of the disease, support and stimulus become necessary. The treatment is little different from that required in marked cases of typhus.

In phlebitis, the employment of bleeding is a vexed question. Some authorities have strongly recommended early bleeding, and others have opposed it, advocating a tonic regimen, and directing all their efforts to the preservation of as healthy a state of the blood as possible. In one instance, in this metropolis, bleeding was tried on a large scale in a lying-in hospital, where venesection was performed on the very first approach of the disease, and the mortality was greater than when an opposite plan was adopted. In the present state of our experience in this disease, bleeding appears to be called for at its commencement, when the pain is acute, and the pulse rapid. But this disease is often so insidious, and its progress attended by such remissions, that it is difficult, if not impossible, to decide on bleeding until distinct evidences of pyæmia have appeared, when bleeding becomes injurious rather than otherwise. As soon as this becomes evident, cinchona, nitric acid, chlorate of potash, ether, ammonia, strong animal broths, and wine, are agreed on by all authorities, as the best line of treatment. Pain must be allayed by opiates, and the painful joints bathed with opiate embrocations, or a chloroform liniment. When collections of matter are evident upon the surface, they should be opened, and it is believed that the external discharge of pus adds somewhat to the chance of recovery. Congestion of the lungs or brain, must be met by sinapisms or blisters, and the meteorismus relieved, as far as possible, by carminatives, turpentine enemata, or the introduction of a tube into the intestinal canal. It is impossible to do more than lay down general principles, and indicate the points of treatment, within the scope of a lecture. A patient suffering from the disease, now under consideration, will tax all the resources, and all the vigilance of the most able and painstaking practitioner.—*Lancet*, Nov. 15, 1856.

ONE CAUSE OF VOMITING IN PREGNANCY.—By M. BRIAN. Unmanagable vomitings may be caused by the confinement of the gravid uterus in the hollow of the sacrum; and such cases may be immediately obviated by the correction of this malposition by manipulation.

ON THE IN-GROWING TOE-NAIL.

G. M. HUMPHREY, in the *Medical Times and Gazette*, says: "I have, in the last year or two, read so many letters in the *Medical Times*, and other journals, on the subject of 'the in-growing toe-nail,' proposing a variety of painful operative procedures, such as removal of part of the nail, cutting off the overhanging edge of skin, cauterizing the fungous growth, as it is called, etc.; and I have seen so many patients who have suffered under this troublesome complaint for months, and even years, in spite of their having been subject to much torture, under the hands of good, even most eminent surgeons, that I think it right to bring before your readers a simple and effectual remedy. It is nothing more than a piece of silver, rolled out sufficiently thin to admit of being bent to the required shape, yet sufficiently firm to bear moderate pressure. This should be nearly the length of the nail, from a quarter to half an inch wide, and bent into somewhat of an S shape,

or rather thus . The lower end (b) is, with the aid of a pair of

forceps, to be carried down between the overhanging ulcerated skin and the nail, and hooked under the rough edge of the latter. The upper end (a) then carried outwards, and secured in that position by a strip of plaster, and a bandage round the toe. By this means, the inverted edge of the nail and the skin are effectually kept from one another, and passed in opposite directions. The nail is a little elevated, and the 'fungous growth' very soon shrinks under the pressure of the metal, and assumes a healing aspect. Often, when the silver is well adjusted, the patient is able to walk about with comparative ease immediately afterwards. I do not interfere with it for several days, when a marked improvement is usually found to have taken place. The silver is readjusted with greater ease, and allowed to remain a longer time. Gradually, the ulcer heals, and the nail grows up in more natural shape and appearance. It is well, however, to continue the use of the silver for sometime; and, after the sore has quite healed, it is well to insert a piece of lint, or small flat piece of silver, under the edge of the nail, to prevent the tender cicatrix being fretted by it, and to keep down the skin. The patient should be directed to avoid

tight shoes, and not to cut the corner of the nail low down. In some bad cases, it has been necessary to keep the patient quiet, or in bed, for a short time; and, in a few, to prepare the way for the silver by the introduction of a piece of lint, secured by a strip of plaster.

“There may be nothing novel in the plan here recommended, but it certainly is not known and adopted so generally as it deserves to be. It suggested itself to me when reflecting upon the nature and causes of the complaint, and endeavoring to find some better means of treatment for this very painful and annoying malady than those I had seen employed, feeling certain that the removal of the side of the nail, or any portion of it, which is usually done, must be wrong, for the simple reason that the skin soon occupies the vacancy so caused, and is most likely to be again fretted by the nail growing up into its former place. Since I adopted the above plan, some years ago, I have found little difficulty in the treatment of the cases, have instructed some patients to carry out their own cure, and have not failed in a single instance. The size and exact shape of the piece of silver must, of course, be regulated according to the case, and a little nicety of manipulation is required to insinuate it between the ulcerating skin and the nail, and hook it under the edge of the latter, without inflicting much pain in the exquisitely tender state of the part.”—*Medical Examiner*.

STRICTURE OF THE MALE URETHRA.

STRICTURE may be brought about in various ways, and dependent on numerous exciting causes. There may be a *spasmodic contraction* of the muscles, involved in the membranous urethra, which may give rise to a temporary contraction of the diameter of that part of the male organ, and assimilate permanent stricture; and there is good reason to suppose that a narrowing is sometimes the result of spasmodic action of the muscular fibers, which are supposed to exist in the anterior part of the normal urethra, and continuous posteriorly, with those of the bladder. In very irritable subjects, the muscles are very prone to contract, and re-

spord readily to causes which in less irritable persons, produce no inconvenience, whatever. These conditions are as amenable to appropriate treatment, as they are readily excited by mechanical stimuli. They disappear readily, and in some cases, rapidly, under appropriate treatment; such as a warm hip-bath, continued for a short time, fomentations applied to the parts, api-ate enemata, or an apiate by the mouth, combined with rest, quietude and antiphlogistic regimen. *Inflammation* may cause contraction, by the swelling it gives rise to. The lining membrane may be the seat of the inflammatory action; either at one point, as the result of injury; or may involve in its ravages, the greater portion of the mucus membrane, as in gonorrhea—one of the symptoms, is a diminution in the size of the stream of urine, which is the result of an altered and contracted state of the canal, through which it passes. The inflammatory process may be exterior to the urethra; either in the areolar tissue of the perineum, the substance of the postate, or adjacent to the rectum; in which case the bulging of the parts involved, may not only diminish the size of the canal, at that point, but may even close it up, and give rise to retention of urine, with all its untoward consequences. The treatment indicated in such a case, must be antiphlogistic, with a view to subdue the inflammatory action; withholding the catheter, until dire necessity requires its interposition; using the bistoury, however, as soon as there is a collection of pus. The canal is frequently narrowed by *chronic changes* of a structural character, taking place in the urethra, which constitutes *true stricture*; a condition of the parts at all times liable to be aggravated by the preceding causes, viz: inflammation, and the spasmodic action of the muscles. The terms “spasmodic stricture,” and “inflamed stricture,” are intended to apply to conditions not involving organic change; but may, and frequently do, accompany permanent stricture. Either one of these conditions may be present, and unaccompanied by the other, and produce temporary narrowing of the canal. The term “stricture,” is intended to imply an organic change in the urethra, resulting in a contraction of the canal, which may have no connection with inflammatory or spasmodic action.

Stricture, however, frequently results from inflammation involving the tissues of the part; which may be excited into action

in various ways. It may be the result of specific virus acting on the mucous membrane, as in gonorrhea; this, no doubt, is the most prolific cause. Gonorrhea is by no means a rare affection; the inflammation is very often of long standing, and of a kind that favors plastic exudation and deposition: hence the pernicious practice, so commonly resorted to, in the treatment of this malady, by strong caustic injections, is more likely to aggravate, than mitigate the evil. A chronic inflammatory process, of a low grade, but little if any higher, than congestion in the scale of action—aided by a prolonged excitement of the canal; either by unhealthy urine, or by excess in venereal indulgence, may, and frequently does result in stricture. Acrid urine is among the most prolific causes; acid may predominate in the urine—it may hold in solution more or less deposit; urination becomes frequent, and each effort gives rise to smarting, during the passage of the urine. At length, a constant state of congestion is established; and that produces not only a discharge from the mucous membrane, but a quantity of plastic exudation, which remains. External injury of any kind, may be the exciting cause; giving rise to an active inflammatory action in, and about the part; the tendency of which is to solid deposition—very difficult to remove by absorption. Hence, violence applied to the perineum; such as blows, or kicks, give rise to the worst form of the malady. The same cause, though lightly applied, may by repetition, produce the same effect; as contusion of the parts, by riding on horseback, or any other means, irritating the parts. It is also believed that the disease has its origin in the unskillful, and in many instances the unnecessary use of bougies, or other instruments passed into the urethra. Ulceration of the urethra, is very likely to bring about a contraction of the canal, during the healing process; and this may be the product of either a common, or specific inflammatory action. One of the most troublesome strictures to cure, is the contraction of the orifice, the result of venereal ulceration.

Plastic deposit, resulting in structural change, involving the lining membrane on the one part, and the submucous areolar tissue on the other, is the proximate cause; and it is found much more frequent in the latter, than the former. Stricture is found occupying varied portions of the canal; at the orifice of the ure-

thra; at the base of the glans, about one inch from the former; at a point about four inches from the orifice, corresponding with the curve of the penis, and the suspensary ligament; and anterior to, or at the commencement of the membranous urethra, which is some six or seven inches from the orifice. The most frequent points of occurrence, are at the curve, and in front of the membranous urethra. It is but seldom, however, that a tight stricture is found at any one point, without more or less narrowing accompanies it at the usual points anterior; in other words, it is more common to find a plurality of strictures, than an isolated bad one.

The degree and extent of the contraction, vary. In some cases a simple band of plastic deposit extends across the canal, from one side to the other; this uncommon form has been termed the *bridle-stricture*, from its peculiarity of form, and difficulty in this respect, from all others. In other cases, the stricture is tight, but limited in extent, resembling, somewhat, the application of a thread passed round the part. More frequently, however, the contraction is more extensive, varying from a few lines, to an inch in extent; and, indeed, in some cases, even embracing several inches of the urethra.

Posteriorly to the stricture, an enlargement, or dilatation, is always found in cases of long standing; whereas, anterior to it, the parts are found in a state of collapse and contraction. The dilatation varies very much in size. It may not be larger than to contain an ounce or more of urine, favoring ulceration of the lining mucous membrane. In this sac, calculus matter collects, and being retained there, gives rise to the formation of stone, which may increase and fill the whole space. From the part involved in the stricture, and from the general mucous membrane, a preternatural discharge proceeds, at first clear, then puriform, and liable to be increased by accidental causes—which always increases and aggravates the congestion. Chronic inflammation of the prostate, is very likely to be brought about, giving rise to an increased discharge. The lining membrane of the bladder, during the progress of the disease, becomes affected, which is not confined to the mucous tissue alone, but involves the muscular coat to a very great extent, leaving it in a thickened and hypertrophied condition; in consequence, of which, both fasciculation

and sacculation of the bladder follow as a link in the chain of morbid changes taking place. It is supposed that these enlarged muscular fibers, arranged in fasciculi; act forcibly on the urine; the urine in turn being forced back by the stricture, reacts on the mucous membrane, giving rise to protrusion through the spaces between the fasciculi. Cysts are thus formed, which receive gradual acquisitions to their walls, and may attain a very large size; equal to, if not surpassing the normal bladder in magnitude. Chronic inflammation of the organ, is one of the many complications. Morbid sympathy does not end with the bladder, however; the kidneys are almost sure to become involved; first by irritation, bringing about functional derangement, then organic change. The kidneys, pelvis and ureters, in turn become very much dilated, giving rise to a copious puriform discharge from their tissue. In this way the formation of stone takes place; the viciated secretion of the kidneys tends to the deposition of calculi, and this again obstructed in its exit, by the abnormal change of the urethra.

The symptoms are so insidious in their approach, that they may not be recognized by the patient. One of the first symptoms that attracts the attention, is the diminished size of the stream, which in time becomes twisted and scattered; the desire to urinate is more frequent and slow, in its passage, and is accompanied with more or less uneasiness, and sometimes pain of the bladder and penis, which subsides on the evacuation of the urine. Even after urination, a few drops, and sometimes a large quantity, pass away involuntarily, from the dilatation just behind the stricture. The linen, in consequence, is kept constantly wet. The increased frequency to urinate is most observed at night. The abnormal discharge from the urethra, may be increased by excess at table, or exercise, resembling gonorrhea, which may not be entirely confined to the urethra, but extend to the bladder. Pain in the loins, thighs and perineum becomes troublesome. In tight stricture the urine may escape drop by drop. Erection is often painful; during emission, no semen passes along the urethra—this fluid returns to the bladder, to be afterwards discharged in an altered state, along with the urine. Enlarged testicles are of frequent occurrence; the rectum, also, sympathizes; in some instances, it becomes prolapsed, inflamed, fissured, ulcerated, or

affected with piles; it is not uncommon to find stricture involving both bowels and urethra, at the same time. Straining, in bad cases, is such as to empty the bowels, as well as the bladder.—Hernia is sometimes induced. An enlargement of the prostate, is one of the many complications; and should it be chronic, relief from the unfavorable symptoms may sometimes be experienced, by the prostatic tumor performing the duty of a breakwater, and in this way protecting the part originally affected. Should ulceration, or abscess, affect the gland, a common result, in that event, the symptoms become much aggravated. In proportion as the kidneys become involved, their secretions become more and more changed; and the acrid urine, passing along the urethra, reacts upon the urethral disease, and makes bad worse.—Retention, is liable at any time to occur, from constriction being suddenly increased, either by inflammatory action, or spasmodic, or both combined. From this condition of the parts, extravasation of urine is almost sure to follow as a consequence; and abscess forms, the contents of which finds its way to the surface, and establishes fistula in perineo, when the symptoms are at least mitigated for a time. In protracted and severe cases, the general health gives way to the disease; the flesh and strength gradually but steadily fail; the digestive apparatus is no longer able to perform its accustomed duty; the countenance becomes sallow, and the patient presents to the observer an expression peculiarly pathognomonic of the malady, which is undermining the very frame-work of the man. General irritation is now established; the changes going on in the kidneys become more and more apparent; small quantities of purulent, mucous and ammoniacal urine pass frequently, attended with distressing sensations; febrile reaction returns with frequency and great force; emaciation advances rapidly; the appetite and digestion give way to the prostrating effects of the malady; and at length coma, accompanied with the unmistakable signs of approaching dissolution, closes the scene; leaving the mortal remains, of what once was a powerful man, to tell the mournful tale.

[TO BE CONTINUED.]

CHILDREN IN RUSSIA.

In the life of a Russian peasant there is a period anterior to all tunics, mantles, and even sheepskins, during which they live a kind of mummy life, only, unlike the Egyptian, it is the first instead of the last stage of their existence. For the youngest children are always swaddled, and rolled up tight in bandages so that they may be conveniently put away without risk of getting themselves into mischief or danger. On entering one of their houses, an enthusiastic traveler thinks he has come upon some pagan tribes, having their idols and penates with the heads well carved out, and the rest of the body left in block. He looks curiously at one laid upon a shelf, another hung to the wall on a peg, a third swung over one of the main beams of the roof, and rocked by the mother, who has the cord looped over her foot.—“Why, that is a child!” cries the traveler, with a feeling similar to that experienced on treading upon a toad which was supposed to be a stone. “Why, what else should it be?” answers the mother. Having learnt so much, in so short a time, the inquisitive traveler wishes to inform himself about the habits of the creature; but his curiosity being somewhat damped by the extreme dirt of the little figure, he inquires when it was washed. “Washed! what, wash a child? You would kill it.”—*Banner of Light*.

[Communicated.]

WHAT INDUCTION HAS DONE FOR MEDICINE.

MESSRS EDITORS:—All history, has proven medicine, like the other sciences, much dependent for its characteristic features upon the molding power of the current literature of the day, and of the available fruits of industry.

The progressive improvement of empirical medicine, through its early ages from HIPPOCRATES, down to the days of LORD BACON, has verified this fact. The cumulative knowledge of appliances in the use of specifics, registered on the tables of the heathen temples—the writings of HIPPOCRATES, GALEN, BELSUR, AVICENNA, etc., all accord in this—they all prove the resources of medicine, at that time, to have been from observation and experience.

Epochs in medicine could then alone take rise from important accidental developments in experience—discoveries occurring in the strict line of observation.

But medicine was destined to revolution in its integral constitution. *Genius*, which, in the latter part of the 6th century, modified the entire range of science, and brought in philosophy as a basis of every system of human investigation, placed medicine, also, upon high grounds. The inductive logic, infused into the minds of men a new impulse, whose fertilizing power has developed the most marvelous fruits in this science.

HARVEY was led by induction, from general facts related by SERVETIUS, COLUMBUS, CÆSALPINUS, and others, in relation to the functions of the blood, to suspect the specific character of its circulation, and he only needed the description of the mechanical structure of the heart, given by J. B. CANNANUS and FABRICUS, to establish his convictions, and thus to lead him to a demonstration of his theory.

Was it not induction from general facts, also related to HARVEY's discovery, which led PAREY to his method of arresting hæmorrhages, by ligature, instead of the actual cautery?

JENNER was not led to the discovery of the benefits of vaccination, without the advantages of induction. In the county of Dorset, (England,) it was found that persons accustomed to milking cows, having the peculiar eruption, then prevalent among cattle, were similarly affected, and it was observed also, that those having had this peculiar eruption, were exempt from small-pox.—When the cow-pox was found to prevail also at Gloucester, and that persons, affected there, were likewise proof against small-pox, JENNER deduced from these general facts, one of a specific character, which, while it has immortalized its discoverer has also conferred inappreciable blessings upon humanity.

CULLEN in observing the supervention of chill in a variety of febrile diseases, was led by induction to his theory of fever, which has been the model of all succeeding authors. BROWN could not cast off the shackles of his master, and although he had thus to admit the primary conditions imposed by CULLEN, yet from his observation of variety in diatheses, he laid down as a fundamental basis, the doctrine of the *Sthenic* and *Asthenic* diatheses which has led the great body of the profession, to the two oppo-

site plans of treatment, *depletion* and *repletion*, or *stimulation* in treating febrile diseases. BROUSSAIS found in his antopsis, the prevalent characteristic of local symptoms involving particularly the gastro-entric mucous, and hence ingrafted his peculiarities upon the profession. This new method (indication) has thus in a continued series of developments, brought forward the grand elements of your present highly cultivated and triumphant systems of medical philosophy. Homœopathy, Allopathy, Hydropathy and the strictly physiological system of medicine, have all had their origin in the inductive philosophy.

Nor have the benefits of induction been confined to pathology and general systematic medicine. It has done quite as much for *Materia Medica*. General facts have led to specific ones. CINCHONA was found to be possessed of general anti-periodic powers, and hence it has been applied on principles of induction to neuralgic diseases, and with great success. A variety of instances of this character led the great HAHNEMANN, to his popular doctrines in therapeutics of *similia similibus curantor*.

The general ideas of concentration in medical agencies, has led, on the same principle, to the discovery of the active principles of Podophyllum, Sanguinaria, Leptandria, Santonicum, etc. A new article now just brought before the profession, the *Papaverine*, a preparation from opium, entirely free from any narcotic power, is now about to take its character among the most reliable material agencies of our profession, and all these may be traced to the legitimate results of induction, as applied to medical science.

INDUCTIONIUS.

Cincinnati, May, 1857.

DISEASED FOOD.

The late developments at Baltimore in relation to the kind of food with which those who cater to the public appetite sometimes supply their patrons, are worthy of something more than a passing remark.

This, doubtless, is but one of a multitude of cases of daily occurrence in our larger cities, and we apprehend that even

smaller places sometimes suffer from the cupidity of unprincipled men, in the same way. Those who seek to become rich and who have no conscience to restrain them, can very often find means to dispose of diseased meats without danger of being detected.

That this evil might be, to some extent corrected by the establishment of public slaughter-houses, as proposed by Mr. GAMGEE in his recent article in the *London Lancet*, which we copy below from the *Medical News and Library*, is perhaps true. But it is highly improbable that the utmost vigilance upon the part of the authorities can ever entirely eradicate it. There are many diseases, both in man and in the lower animals which take a firm hold upon the system before there is any possibility of detecting them. One or two examples drawn from the disorders common among mankind, which are much better understood than those prevailing among the lower order of animate beings, may serve to illustrate. The virus of small-pox makes its impression and brings the system fully under its influence, within a definite period after exposure to it occurs. Can any one doubt that the subject of it is really diseased, even before the symptoms begin to manifest themselves? Typhoid fever often makes its invasion so stealthily that its approach is unsuspected until the subject of it is sick—very sick. That the malady is in the system, in an undeveloped form, for some time before it is made apparent by the outbreak of the characteristic constitutional disturbance is certainly true. Now must not the same rule apply to incipient disease in such animals as are used for food? Does it not really apply with greater force? The means of detecting physiological disturbance in the human body are far better understood than in the case of any of the lower orders of animals.

That some form of disease, either incipient or in fuller development, does exist in most of the animals used for food, admits of no denial from any one who has given his attention to the subject. The habits of an animal can not be greatly changed from a natural to an artificial state without a disturbance of the physiological forces in it. The undue accumulation of fat induced by overfeeding and close confinement, in stall-fed animals as usually prepared for the markets, is as really a symptom of diseased nutrition as is the emaciation which in some forms of cachexy attends upon derangement of the digestive functions.

But this is not all. The blood of all animals is charged, not only with material for the nourishment of the various tissues of the body, but also with disintegrated matter, the product of the natural wear and decay of those tissues, which is excretory and can not be retained in the circulation without detriment to the vital functions. Under the most favorable circumstances, a portion of this excretory matter must be retained in all butchers' meats. How much worse is the case when to this poison is added the specific virus of some loathsome disease! The difficulty of procuring wholesome meats, especially in cities and populous villages, is, and must necessarily be, much greater than people usually imagine.

The tendency of the world is not *toward* but *from* a healthful dietetic system. Between the *want of science out of the medical profession, and misdirected science in it*, things continue to grow worse and worse. Both animal and vegetable food undergo processes of preparation, mechanical and chemical, disturbing the proportions of the alimentary principles contained in them, or adding to them foreign, innutritious, and not unfrequently, pernicious, ingredients. To correct this evil we must return to natural habits. However learned may be the theories looking in other directions, they are, when carefully weighed, nothing better than refined nonsense.

The great desideratum in the problem of health is to learn what to eat and drink, and how—what are the conditions of health, and how, in the highly artificial state of society around us, we may so attend to them as to derive the greatest possible benefit from them. When this is solved, the complicated ills of life, which now rise like mountains in the pathway of every son of Adam, will have dwindled down into comparative insignificance. But this is a work of no trifling moment. It comprehends the entire regeneration of man, morally, mentally and physically. How far dietetic reform alone will lead to the consummation of this great object, we need not now stop to inquire. That it will do much to promote the physical improvement of our race, and that the highest perfection of the physical man is an essential requisite to a like degree of mental and moral development admits not of a reasonable doubt.

G.

Diseased Meat in London, and the Cattle Epidemic.

Danger to the Public Health.—Mr. J. S. GAMGEE, in an article in a recent number of the *Lancet* (March 21), makes the following statement:—

“On Monday morning last, the 16th inst. (March,) I proceeded to the New Cattle-Market in Copenhagen Fields, to inspect the live and slaughtered cattle. The live beasts were generally extremely well conditioned and thoroughly sound; but standing amongst them were *three diseased beasts*. One of these was emaciated and hide-bound, with *abscesses* in various parts of the body, particularly over the region of the head and neck. From the clinical observations I made on diseased cattle nine years ago, I believe this case was most probably one of pyæmia following typhoid fever. A second beast was in ill health—viz., thin and feverish, but I could not make a precise diagnosis. The third diseased beast was a fat one; it was lying down, moaning, looking round anxiously at its flanks; pulse 110; respiration 45; pleuro-pneumonia.

“I now proceeded to the slaughter-house of the market. In that slaughter-house I saw five carcasses, three of oxen, two of sheep. One of the latter was of magnificent shape and condition, so far as fat was concerned; but the whole carcass had a uniform dusky red color, evidently the result of a general infiltration with blood serosity. The carcass having been trimmed and completely dressed for the butcher, I had no means of inspecting viscera. Two of the oxen were much emaciated, and had apparently died from typhus or typhoid fever; they presented numerous bloody extravasations in the subcutaneous, intermuscular, and sub-pleural cellular tissues. I should have required to see the intestines, in order to state accurately the nature of the disease, but those viscera had been removed. The third oxen was large; moderately fat; pleuro pneumonic. I carried away the lungs of this beast; they were infiltrated with solidified plastic matter in almost their whole extent; so that, whereas their average weight should have been about eight pounds, it was twenty-seven pounds. The disease was in its acute stage. Although the carcass had been very skillfully trimmed and dressed, the flesh in the walls of the chest and abdomen bore unmistakable marks of disease. The slaughterman stated that these carcasses would be conveyed to the city markets, where they would be *sold as food*. In his opinion, those carcasses

were not diseased, nor would they be considered such by the city meat inspectors. He even maintained that the lungs were not diseased; he said that they only contained congealed healthy blood!

“I proceeded, on the 17th inst., to the Mansion-house, with a portion of the above diseased lungs, and of a healthy lung, to demonstrate the difference. I was not permitted to make a statement of the facts in open court, the clerk stating such a course could not be pursued. As the lord-mayor did not sit in court yesterday, I took the liberty of sending in my card to his lordship, with a prayer for an interview, which was most graciously granted; but his lordship could not, in his capacity as magistrate, hear my verbal statement, and he suggested that I might take out a summons against any guilty party, or submit to him a written statement, which he would forward to the City Markets, Commission. I sincerely thanked his lordship, and applied in the Court for a summons against Thomas William Fairy, the slaughterman whose name was painted on the door of the building in the New Cattle Market, wherein I saw the diseased carcasses, and whence I had carried away the lungs; being careful, however, to obtain full evidence that these lungs had belonged to beast slaughtered and hung up as fit for human food, by a servant of the said Thomas William Fairy. But the summons against this individual was not granted me, on the plea that the New Cattle Market, in Copenhagen Fields, is not in the city police district, but in a totally different one, in which jurisdiction was exercised by the magistrate sitting in Clerkenwell. His worship received me most kindly, and with great pains examined with me the acts of Parliament under which we might summons Thomas William Fairy. His worship stated that the case was new to him, that he did not feel that he had any jurisdiction under the circumstances; but he pressed me to continue my researches, with the certainty of their being of great public utility.

“The amount of diseased meat sold in London is enormous. Sanitary legislation, with reference to this particular subject, is defective in principle, in so far as it is based on insufficient knowledge; it is useless in practice, in so far as intrusted for execution to a very few persons, neither fitted by education nor station to protect the public health. I shall demonstrate the whole nature

and extent of this gigantic evil ; point out the errors in legislation, errors of omission and commission ; and propose simple, economical measures, which, if immediately carried into effect, will arrest the evil all but *instantly*. Inspectors, competent in knowledge, and sufficient in number, must be appointed at all ports of importation, and at all live and dead meat markets ; these inspectors must be professional men, who can distinguish between simple pneumonia, epidemic pleuro-pneumonia, typhoid fever, and pestilential typhus, to all of which diseases cattle are extensively subject. These inspectors must be men of energy, and the work must be begun immediately and thoroughly. All private slaughter-houses in large cities—in London especially—must be abolished. Public slaughter-houses must be established ; they will pay their own expenses, and sufficient guarantees can then be given that only healthy beasts shall be killed and distributed to the population.”

At a meeting of the Medical Society of London, Mr. J. S. GAMGEE exhibited specimens of the disease which he had obtained the day previously from carcasses slaughtered at the New Cattle Market as fit for human food. He also exhibited a water-color drawing, executed by Professor JOHN GAMGEE, of a large clot of blood extravasated in the glutei muscles of a cow that had died with typhus fever. Numerous such sanguineous extravasations had taken place in various parts of the body, and were cut away by the slaughterer ; the fore-quarters were then sent to a butcher's shop at the East-end of London, and the hind quarters (most damaged) to a sausage-maker. Mr. GAMGEE had visited Newgate Market that afternoon, and seen an enormous quantity of diseased and half-putrid meat offered for sale there. The inspectors of the market were nowhere to be found ; and the nefarious traffic was proceeding without the least attempt at concealment. Mr. GAMGEE commented on the great defects in the law relating to the inspection of markets, and on the certainty that the blood and parasitic diseases of animals used as food, must produce a marked depressing effect on the ratio of human life.—*Lancet*, March 28, 1857.

Mr. H. H. RUGG, in a communication to the *Lancet* (March 28), says: “Having visited almost every slaughter-house and cowshed in London, I can fully corroborate Mr. GAMGEE's statement

in the *Lancet* of the 21st inst., as to the quantity of diseased meats consumed in this metropolis. In my pamphlet on the Adulteration of London Milk, published some years since, I stated that one slaughterer in London took annually \$200 from one man for slaying diseased cows, their flesh being consumed by the poor. Many of the large cow-keepers slaughter their diseased cows on their own premises, so that they are not seen in any market of live-stock. I am sorry to say that not the least reformation has taken place since that period."

The *Scotsman* contains a statement from Mr. HOLLAND, Government inspector, who is at present making an inquiry into the "advantages and disadvantages" of the celebrated Mater Meadows at Edinburgh, his attention having been called to the unhealthfulness of the cows fed upon the grass of the meadows. Mr. HOLLAND, in his opening remarks, says: "It appears undoubted that cows do suffer an unusual amount of illness, but I incline to attribute that to other circumstances than peculiarity of food. The chief of these are overcrowding, defective ventilation, and excessive dirtiness—influences which are apt to be unusually injurious to animals very highly fed in order to produce large supplies of milk." He then says: "I noticed in a letter by Mr. GAMGEE, published in the *Scotsman* of February the 28th, that gentleman estimates the loss of cows from sickness at about 30 per cent., which is not, I think, an over-estimate, enormous as it appears; for I find the dairymen are in the habit of killing off all their cows soon after they become dry, and I noticed that a large proportion—perhaps one in ten or twelve—of those which I saw were evidently suffering from disease. It is but fair to assume that the cows which do become diseased are first selected to send to the slaughter-house. That this is the case I have received confirmatory evidence. It is possible, as is asserted by the fleshers, that many diseases do not render the flesh of animals unfit for food; but many diseases certainly do render it unwholesome, and almost all must impair its nutritive qualities. The latter being the case, the unqualified sale of such meat is evidently a fraud on the buyer; nor must we conclude that because much flesh of diseased animals is eaten without apparent injury, that that practice is free from danger, for the history of all epidemics proves that many more than the actual sufferers may be exposed to the cause of disease. It would be

surely prudent to adopt every means within our reach—first, for ascertaining which, if any, of the diseases of cattle do not render meat dangerous for food; and secondly, rigidly to exclude from the market all which such injury leads us to condemn. It is clear that such research is far beyond the ability of an ordinary flesher, however experienced; besides which, such a person is likely to have sympathy with those whose malpractices he ought to control—nor would his decision, if adverse, be so readily submitted to by them as those of a scientific man would be. I am informed that diseases involving the liver, even when amounting to abscess, are not considered by the fleshers to render the meat unfit for human food. Now, we know that cattle are very subject to the attacks of parasites, which chiefly accumulate in the liver. These are hydatids, or bladder-worms: and we are told upon high authority that these parasites develop into tape-worms on entering the systems of other animals. Meats are, indeed, less liable to be thus injured, inasmuch as their meat is generally cooked; but abundant facts are at hand to prove that imperfect cooking may fail to destroy the vitality of the embryo tape-worm.” Mr. HOLLAND then observes: “I find it very hard to believe that animals dying with extensive disease of the liver can yield wholesome flesh. At all events, all will agree that as long as there is any doubt about the matter, such meat should not be unconditionally offered for public sale. There is, perhaps one exception, viz., fluke in the liver, which is prevalent in the great majority of sheep slaughtered, its innocence, so far as the flesh is concerned, may be assumed.” In conclusion, he says: “Edinburgh offers unusual facility for bringing all the meat under examination, and thereby excluding from its market all that is improper. No meat is allowed to be slaughtered in the city except at one place, and all cattle there slaughtered might, at little expense of labor, be carefully examined by persons accustomed to zootomical research, and well acquainted with the morbid appearances of animals. Such persons could therefore easily separate the unquestionably wholesome from the doubtful and injurious meat, and, by carefully conducted inquiries, determine whether any of that meat described as doubtful may be safely used with common cooking, or could be made safe by any peculiar process.”

COMMUNICATION.

BY J. WATSON, M. D.

PETERBORO, Madison Co., N. Y., May 1st., 1857.

It may be interesting to the readers of your valuable journal, to know something of an epidemic prevailing in this, Onondaga, and Oneida counties (and which has been improperly called Brain Fever,) and has under Alopathic treatment carried many victims to the grave; clad many families in mourning, and made vacancies in the social circles; in many instances in from twelve to twenty-four hours.

This strange malady has prevailed in these vicinities since February last; but we are happy to state, it is now subsiding, and steady warm weather, we hope, will vanish the disease entirely from our midst.

The best method of communicating the character of this disease, will be to report one or two cases in detail.

CASE 1st. The first case occurring in our village, was that of a young man aged seventeen years, son of A. C. STONE, Esq.

March 26th. Was called in the evening, found the patient of robust constitution, full habit, suffering extremely; with much delirium, florid countenance. Pulse ninety per minute, with but little fever, but much congestion of the brain.

Gave no medicine at first, but ordered the feet to be immersed in warm water, then put the patient in bed, applied hot corn about the extremities and body, which produced a profuse perspiration in twenty or thirty minutes. I then gave a powder composed of the following; Podophyllin grs. iiij, Meacrotin grs. ss; repeated the same dose in one hour, and in two hours from the time the last dose was given, gave a teaspoonful of a powder composed of

R. Jallap, pulv. 3 iiij.

Alex. Senna, pulv. 3 viij.

Peppermint, pulv. 3 iiij.

Repeated this dose every two hours until free catharsis was produced, then gave a powder every two hours, composed of Ipecacuanha grs. ij. Sup. Carb. Soda, gr. j.

March 27th. Called again, found the congestion much relieved, the patient composed, skin moist, tongue moist, but somewhat

loaded with a brown coating, pulse sixty per minute, pupils somewhat dilated with some fixedness of the eye. Gave a powder composed of Podophyllin, grs. jss. Macrotin, grs. ss., which had the effect to move the bowels in the evening. Continued as before directed with the addition of Mustard Cataplasms to the feet and stomach, some nausea and vomiting existing. Advised, if restless, to increase the perspiration by the use of the corn as before directed.

March, 28th. Pulse fifty-eight, coating on the tongue less; skin moist, patient perfectly sane, complained of some headache, some pain in the back, but kidneys acting freely, thirst much less, sickness of the stomach subsiding.

March 29th. All the symptoms continued much the same, continued the same treatment.

March 30th. Patient rested well during the night. Pulse sixty-four, coating rapidly leaving the tongue, headache much less. Skin moist, Pupils natural, patient somewhat cheerful; continued the same treatment.

March 31st. Patient rested well during the night; Pulse sixty-eight. Skin moist. Tongue nearly clean, complained of a large and light sensation in the head, but nearly free from pain. Continued the same treatment, with a tea-spoonful of brandy every two or three hours, with a little more sustaining diet.

April 1st. Patient still improving, rested well during the night. Pulse seventy-five, with a good volume, and indulging in the jokes and mirthfulness common to the day. The Liver acting well, Kidneys free, altogether exhibiting symptoms of a speedy convalescence. Continued the brandy, with the Ipecac and Soda to keep the skin moist.

April 2nd. Found the patient sitting up. Tongue clean, some appetite; much more natural sensation in the head. Continued the brandy with an occasional dose of Podophyllin to keep the bowels free; and to-day, May 1st., came into my office, saying, that he never felt better in his life.

REMARKS.—For the benefit of the Profession and the world, permit me to say here, that Podophyllin is one of the best, if not superior to any other remedy, to unload the vessels of the brain; which effect is produced by its action on the Mucous Membrane of the stomach and bowels, and upon the Glandular System.

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KINESIPATHY, OR THE MOVEMENT CURE.

BY CHA'S F. TAYLOR, M. D.

THERE has existed in Sweden, for more than forty years, an institution, under the patronage of the government, for the treatment of many forms of chronic diseases by movements, known by the several terms of Kinesipathy, Medical Gymnastics, or more properly, the *Movement Cure*. This system of cure is essentially scientific, being based on the anatomy, physiology, and pathology of the human system and the relations of its several parts; and though the success attending its practice was very marked from the first—even members of the royal family having been treated and cured by it; and though departments based upon the same principles, and adapted to the physical development of the health, had been into the training schools of Sweden for exercising soldiers and recruits, and even into the common schools of that country, for the physical development of the youth—yet, curiously enough, it did not attract the notice of the *savans* of the rest of Europe, till within a very short period. Only a few years ago the Prussian government sent a commission to Stockholm to inquire into the merits of the Swedish system, both in its application to the cure of diseases, and for the harmonious development of the young and the healthy. The result was the establishment of an institution at Berlin under royal patronage.

Other European Governments—more mindful, often, than individuals of the public health, for sinews strong and active are necessary to wield bayonets on which thrones are upheld—have

since followed the example of Prussia, till now, according to Dr. ROTH, "Sweden, Russia, Prussia, Saxony, Austria, and Hesse Darmstadt have normal training institutions for educational and military gymnastics, supported by government, where anatomy, physiology, and hygiene are taught, the knowledge of these sciences being deemed indispensable for the teacher of scientific gymnastics. Professor BRANTING, at Stockholm, M. de RON, at St. Petersburg, Mr. SPIESS, at Darmstadt, and Mr. KLOSS, at Dresden, are at the head of these institutions, at which thousands have been cured." Of such value is this treatment esteemed, especially in many diseases of the nervous system, that it has been introduced by government into the Insane Asylum, at Vienna; and also these movements are employed in the Lunatic Asylum at Sonnenstein and Berlin. There are now about forty institutions, public and private, on the Continent, in which many forms of disease are treated with great success; four in England; besides these, three of the hydropathic establishments at Malvern employ the movements in connection with the Water-Cure treatment; viz., those of Dr. WILSON, Dr. WALTER JOHNSON, and Dr. MARSDEN. All of these were visited by the writer, and at Dr. ROTH's, in London, he was a daily visitor for more than three months.

The movement cure owes its conception, development, and establishment on a scientific basis to the genius and persevering efforts of PETER HENRY LING, a name beloved and revered in Sweden, his native land, almost as much as that of our own Franklin with us. LING was a man of high intellectual culture, a poet, and possessed a genius of no ordinary stamp. At one time he was afflicted with a rheumatic affection of the arm, which failing to be relieved by the usual means resorted to in such circumstances, he conceived the idea of curing it by muscular movements. He accordingly learned fencing, which cured his arm. Gratified and encouraged by this success, he conceived the bold idea of applying *movements* for the cure of most chronic diseases, and set himself industriously to the study of anatomy physiology, and co-ordinate sciences, that could aid him in investigating the exact character of every movement, whether general or regional, to which the body or any of its parts, can be subjected. The result was a system of movements, and their physiological effects upon

the venous, arterial, nervous, secretory, and muscular systems, being based in its hygienic influence on the harmonious development of the whole man.

By influencing the innervation ; by controlling the circulation ; by causing a normal condition of the capillaries, thus promoting nutrition ; by causing absorption in one part, and effusion of plasma and organization in another ; by facilitating the waste and repair of tissue, through aiding the chemical change of particles ; in short, by bringing into normal and healthy action the various functions of the body, which is the expression of physical life, LING's system affords us another aid toward forming a complete system of treating disease intelligently, rationally, scientifically, without mystery or medicine, and with a real gain to suffering humanity.

Before discussing the philosophy and physiology of the Movement Cure, perhaps it would be best to attempt to give some idea of what these movements consist of, and how they are made ; but it is as difficult to describe a "movement" of a peculiar kind to those who have never seen any thing of the sort, as to give a correct idea of the characteristics of music to those who have never heard sounds of harmony. I can only illustrate. When it is proposed to employ bodily movements for the cure of disease, the idea is generally formed, by those unacquainted with the subject, that they consist of various leapings, rope-climbings, contortions and the like ; or else, rubbings, shampooings, curryings, etc. But how useful soever all these may be in their place, they form no part of LING's system of Curative Movements. The latter embraces a distinct system, complete in itself, and entirely original and distinct from all other hitherto employed means of cure by bodily movements. In LING's system every movement is pre-determined—manner, direction, time, force and quantity.

To move the whole body or any of its parts, even with force, is not enough ; but to move it in a manner and direction with rythm and force, all previously determined with reference to the accomplishment of a certain result—that would be a therapeutic movement.

To chop off a leg with an axe would not be surgery, but to remove the leg at a certain point, in a certain manner, depending

on the anatomy and the pathological conditions the case presents—this would be a surgical operation.

1. In the curative exercises the *position* is of the greatest importance, for a movement that would be very easy and proper for a patient in one position, might be quite impossible in another; and the same movement and position might be correct and beneficial for one patient that would be improper and injurious for another. The character of the movement administered to any patient depends entirely upon the character of disease with which he is afflicted, presenting certain indications to be responded to. Being based upon the anatomy and pathology of the parts in which physiological integrity is to be promoted, each case must have its own separate prescription, as the result of careful diagnosis and analysis of those functions whose activities should be increased. Each prescription consists of eight to twelve movements, which are arranged so as to promote some definite physiological result. In order to express easily and concisely the ideas contained in such a prescription, the Swedes and Germans employ a characteristic *nomenclature*, from which has arisen a corresponding one in English. These names of positions and movements (which are only a kind of abbreviations) are generally derived from some real or fancied peculiarity of the attitude and manner. Each prescription—that is, each set of movements that it has been determined are applicable to the case—is administered daily, till there arises, from change of symptom or progress towards health some reason for changing it; another is made in the same manner; for, more than by any other treatment, the Movement Cure in those where it is applicable, will better fulfill the indications presented by each case, and at different times in the same individual. To better illustrate the foregoing, and at the same time show how efficacious are properly directed movements, I will here introduce a

CASE.

S. E. L. T. had been principal of a seminary for several years, the cares and anxieties of which had so far impaired her health, that about a year ago, she entirely broke down, and was obliged to return to her friends. The prominent symptom was an inveterate constipation. She passed along miserably till May, when the trouble increasing, resulted in an attack of gastritis, which

prostrated her for several weeks. From this the constipation became worse, with frequent attacks of gastritis, and her sufferings at times were intolerable. This was her condition in December last, when she came under my care to be treated by movements; for all other means, including water-cure appliances, had only rendered temporary relief. Of course there was great bodily weakness and inability, and for *eight months*, except for a few days in September last, she had not had a natural evacuation. Here, among those of minor importance, were two principal indications to fulfil, viz.: 1st. To promote general tonicity in all the parts by increasing capillary circulation and consequent nutrition; and 2d. To have special reference in every movement to the constipated condition of the bowels. To do that intelligently, we must inquire *Why* are the bowels constipated? Either because the muscular fibers of the intestines have lost their integrity and can not create the vermicular motions to propel the contents forward, or the secretion of intestinal fluids and mucous is diminished, rendering the feces hard and not easily carried forward; or, more likely, both of these causes combined. Now the condition necessary for secretion is a proper supply of healthy arterial blood to the secreting gland, and healthy nutrition of involuntary muscular fibers also depends on the same arterial capilarity. Hence it follows that the vermicular motion and intestinal secretion would be secured by establishing a natural arterial capillary circulation in those organs. I give the prescription, not expecting that it will be fully understood, but as a sample for the curious. It is as follows:

1. Cover chine lean inclined stride standing, trunk back pulling (E).
2. Hight opposite standing, leg inward pressure (E).
3. Back fall stride sitting, double arm extension (E) and (C).
4. Hight opposite kick standing, leg back pulling (E).
5. Spon grast standing, abdomen concentric stroking.
6. Rest reclined high stride sitting, trunk twisting (E).
7. Opposite standing, chine knocking and stroking.
8. Think long sitting trunk back pulling (E)
9. Stretch stride sitting upper and fore-arm flection and extension (C. and E).
10. High stride sitting, trunk rotation.

11. Opposite crooked standing, back longitudinal clapping and stroking.

In No. 1 the term "cover" means that the hands are placed in a certain way on the head; "chine lean"—the sacrum against a bar; "inclined"—the body bent slightly forward, etc. "E" "C" determines the character of the movement, whether eccentric or concentric; the portion preceding the comma indicates the "position," and that after the comma denotes the kind and quality of the "movement." They are technical terms, that require considerable study to become familiar with them.

The above set of movements were administered daily for about ten days, when the healthy evacuations returned, and till now (Feb. 9th) the bowels have continued in the uninterrupted and spontaneous use of their functions; there has been no return gastritis, patient's usual strength has returned, and in all respects the cure seems to be radical and permanent.

CYNANCHE PAROTIDÆA.

BY D. R. MALONE, M. D.

It is well known to all, both professional and unprofessional, that cynanche parotidæa, or mumps in its simple form, requires but little medical treatment; due attention to the temperature of the patient, relaxing fomentations applied to the parotid glands, and sufficient amount of pure atmosphere, is generally sufficient to secure a speedy recovery.

Occasionally, however, in our professional rounds, we come in contact with other forms of this disease, which demand a different and more energetic treatment. To the treatment of these, I invite attention. It is now generally conceded, that this disease is metastatic, that it is liable to mutation, and often is translated from the parotid glands to the testicles of the male, or the mammæ of the female, and sometimes to the brain. I shall not attempt to notice in detail, the remedies usually prescribed in such cases, but shall speak particularly in reference to one, almost universally prescribed.

In cases of retrocedent parotitis, the practitioner usually attempts to call back the inflammation to the parotid glands. In his efforts to accomplish this end, he is necessarily compelled to bring to his aid, epispastics, or revellents,—agents that will produce inflammation in a healthy part; and hence the question arises, is this a rational treatment. I do not wish it to be understood, that I am contending against the use of revellents, as a remedy, but the ordinary application of this remedy, in this disease, I must say, with due regard for the feelings of those who may differ with me,—I believe is productive of more harm than good. I have often used revellents, and have seen others use them, in good faith, in cases of retrocedent parotitis, with the intent of calling back the inflammation to its primary seat, and have as often witnessed an inglorious failure. After repeated failures of this kind, I began to think all was not right in Denmark!

I investigated the subject carefully, and came to the conclusion: The primary inflammation is metastatic: this being true, may not the artificial inflammation, which we produce by our revellents, also be metastatic, and thus we become unwilling agents in the hands of the enemy; in other words, if the primary inflammation can be translated from the parotid glands to the testicles, mammæ, or the brain, the artificial inflammation is liable to the same mutation; hence, we are driven to the conclusion that this practice is physiologically and philosophically wrong.

I wish now to present briefly, the history and treatment of a case, that came under my care some time ago. The patient was a man of temperate habits, and had generally enjoyed good health. On the fourth day after the attack, the parotid glands were much swollen and very painful, in the evening of the same day, however, the pain and swelling very suddenly quit its seat in the parotid glands, and passed to the testicles. Up to this time he had received no treatment whatever. Accordingly, as I had been instructed in the treatment of this disease, I began the treatment by applying revellents to the parotid glands, with the view of calling back the inflammation to its primary seat. His bowels being constipated the following cathartic was recommended:

R. Podophyllin, gr. ss.
Leptandrin, gr. j.
Jalap, ʒ. M.

After the action of the cathartic, he took of sweet spirits niter and tincture of gelseminum āā xxx gtts, every two hours alternated with a warm decoction of *asclepias tuberosa*. The testicles were suspended in a sling, and enveloped in a cloth, saturated in a strong decoction of hops, and muriate of ammonia combined. The same night, the symptoms gave unmistakable evidence that the brain was involved, and the following morning found him in a fit of delirium; his extremities were cold, head very hot, and every sign of great congestion of the brain. I was now thoroughly convinced, that the revellents, had increased the difficulty, and hence removed them. I now had the patient placed in an inclined position, with his feet in a tub of warm water, made warmer by the addition of ground mustard, had a sack of crushed ice placed to his head, and warm vapor applied to the whole body, and at the same time continued the diaphoretic medicine. This operation equalized the circulation, and restored the patient to consciousness and ease. He was then ordered to take a teaspoonful of *asclepias tuberosa* and *cypripedium*. After the lapse of ten hours, pediluvia was again recommended, cold applications were continued to the head, and the solution of ammonia and hops to the testicles, during the interim. On the morning of the third day, I found the patient much improved; the testicles were reduced in size and temperature, the mind calm and conscious, the head clear of pain, in a word, he was convalescent. He was now placed upon Hydrastin, Cornin, and Leptandrin, āā given in two grain doses, every three hours. Left orders to eat light and nutritious diet, and to keep his apartment warm, but well ventilated.

STRICTURE OF THE MALE URETHRA.

(CONCLUDED.)

THE treatment of stricture, ought to be so conducted as to secure success, without resorting to harsh, or violent measures, if possible, for the reason that they tend to increase, rather than remove the plastic deposition on which stricture depends. Stricture is by no means as easily removed, as might be supposed; even by those skilled in this department of operative surgery. Though involving simple principles of surgery, it is accomplished, only, by the exercise of great care and judgment. It may be effected in numerous ways; all of which have one of three objects in view, viz: The production of absorption, by the application of pressure applied to the part. Secondly: by so conducting that pressure as to produce, or bring about, a state of active congestion, for a short time, only; so that, when resolution takes place, a rapid diminution may be effected. The pressure ought never to be so long continued, or violently applied, as to establish inflammatory action, for the reason, that inflammation favors deposition—the very opposite of that which is sought to be attained. And ulceration, one of the links in the chain of inflammation, though for a time expanding the canal, its ultimate tendency is to contract, by the formation of a cicatrix. Thirdly: by the use of the knife, not as a sole reliance, but as a valuable auxiliary to the bougie.

The mode of cure to be instituted, will depend mainly on the kind of stricture—its extent, and the part involved. For the purpose of exploration, a wax bougie, of moderate size, should be obtained. It should not be too small, for the reason that it might become entangled in the numerous lacune studding the mucous membrane, and assimilate stricture; or, passing freely through a stricture of only moderate tightness, might lead to a false conclusion. Nor should it be so large as to impede its free ingress into the canal. An instrument of proper size, should be selected, warmed, and made pliable by the hand, then gently and slowly introduced. If any obstruction be met with, it is withdrawn, afterwards introduced. This is done believing it to have caught in the membrane. If upon its introduction the second

time, it meets with the same obstruction, at the same place, it is reasonable to suppose that stricture is the opposing body.—The site of the stricture is noted by making a mark on the instrument, to indicate the extent to which it has entered. To obtain additional proof, the instrument is passed steadily forward, so as to fix the point in the stricture; on withdrawing it, the character of the stricture may be obtained by the impression made on the instrument's point.

Having made the necessary exploration, and in possession of the knowledge for which the instrument was used; the next step to be taken is to commence the treatment for a radical cure. A metallic bougie of suitable size should be selected. The best instruments are those made of steel, highly polished, and consequently smooth. The curve should be gradual and slight. However, a variety of causes will be found necessary to meet the indications of different cases. Some requiring the segment of a large circle, others the segment of a smaller circle. A set of instruments embraces all sizes, ascending gradually, from the wire-like, to a size that will fill the normal urethra. The instrument should be lubricated with sweet oil before its introduction; and gently but steadily pressed forward, and through the stricture, if possible. After which, the instrument is allowed to remain a length of time, varying, in different cases, according to the feelings of the patient, from a minute to half an hour. Should the patient complain of the instrument producing pain, it should be removed immediately; remembering that the object is to produce absorption, not inflammation. In the course of a day or two; depending on the amount of irritability produced; another attempt should be made, not however, till the irritation produced in the first instance, shall have subsided; the same sized bougie should then be introduced, and soon withdrawn; and a size larger substituted, introduced and allowed to remain a minute, two, or three, as the case may be. A repetition should be made once a day, once in two days, or as often as required; till a bougie of the largest size can be readily introduced. It is neither wise nor prudent to suspend the operation for weeks, or months, because of the tendency to relapse; but, should be introduced at longer intervals of a week, two weeks, and lastly a month. In the

course of six months, not sooner, can a reliable cure be accomplished.

The bougie alone is not sufficient in all cases, to perfect a cure. If the urine be found, by careful examination, to be in an unhealthy state, it should be attended to promptly, and if possible, rendered innocuous. For if acrid urine be allowed to traverse the diseased mucous membrane, constantly irritating its delicate surface, all other means are destined to fail. The urine plays an important part, and in proportion as it is neglected, so will the malady be prolonged. Diet should be so regulated as to obviate all causes of irritation from that source. Exercise restricted to a moderate amount, or none at all, and severe exercise positively prohibited.

The introduction of the bougie should be conducted with great care; being ever mindful of the injury that may be done by rashness. It ought to be lightly held in the fingers, point upwards, and allowed to feel its way, rather than forced along the urethra; and when the point meets with the stricture, it should be very gently pressed against it, and retained there for a short time—the hand withdrawn, and if the instrument be not caught in the stricture, it bounds back; but, if retained, it is proof that the stricture has been entered. According to the evidence obtained in this way; a small or large instrument is selected, and gently propelled along the urethra, maintaining it in a straight line.

When the stricture is behind the pubic arch, the index finger introduced into the rectum will be found a valuable aid in directing the instrument, and especially so, should the prostate gland be involved. In consequence of structural change involving the prostate, it is sometimes impossible to introduce a metallic bougie, a flexible one ought then to be tried, which will most likely enter.

The stricture may not yield at first to the instrument; but by gentle pressure for a short time, will most likely give way, and the instrument either pass into, or through it.

It is not absolutely necessary that the instrument should pass through at the first attempt. Providing the symptoms are not very urgent, a small instrument may be introduced and forced down upon the stricture, and retained there for a short time, or as long as the patient can bear it, to be re-applied at suitable inter-

vals. After several such attempts, the stricture may relax and allow the instrument to enter it, or pass entirely through it.

In the introduction of the instrument, a tendency to produce a false passage ought to be guarded against. It may be known by having used an unusual degree of force; and being conscious of something having given way; and in propelling forward the instrument a roughness is felt at the point; and the patient complains of pain.

Such an occurrence never ought to transpire. Neither will it, providing the necessary caution be taken during the manipulations, with the instrument. The only circumstances that admit of force, are those of urgent necessity. When the overcharged viscus requires prompt and immediate relief. Should the stricture be in an inflamed condition, prohibiting the use of the catheter, prompt measures must be instituted. Free cupping or leeching of the perineum, or the patient may be seated in a warm bath, or submitted to the action of a vapor bath. Opiates administered internally, or per anum. Very probably relaxation will be brought about in this way, superceding the necessity of any other measures, and the urine pass off at first in drops, then in a small stream, till entire relief is obtained.

False passage may give rise to the escape of urine into the adjacent parts; and its consequent sloughing or abscess follows; depending on the manner and extent of infiltration. Providing the false passage be incomplete, opening into the urethra, only on the distal side, urine is not so likely to enter as when the opening is complete. The former is likely to favor urinous abscess, the latter urinary infiltration. Inflammation is very likely to be established, with its numerous untoward consequences, softening and ulceration, with their sequels; and the healing and consequent contraction may leave the stricture even worse than before; leaving out of question the constitutional disturbance which the inflammatory action would most assuredly establish, acting on an already enfeebled constitution.

A false passage once established is very difficult to avoid in subsequent introductions of the instrument. For days nothing should be introduced; till nature has had time to partially or completely repair the injury. And when an attempt is made, great care should be observed not to enter the false passage.

There are strictures to be met with, that are not amenable to the modes relied on, and briefly referred to; but require, for their removal, a prolonged action; the establishment of active congestion; so that, on its resolution it may carry away not only its own effusion, but that deposited prior to, and constituting the stricture. Such are tight and unyielding strictures of long standing. A small instrument may be passed through them; but from their dense texture, no progress is made. It becomes necessary to increase the action of the instrument in its application to the parts. This is accomplished, by selecting a silver catheter of suitable size, which is carefully introduced into and through the stricture. In that position it is allowed to remain, and retained by tapes appended to the rings of the instrument, and secured to a band around the waist. The tube of the instrument is blocked up with cork, which is to be removed, from time to time, for the escape of the accumulated urine. The instrument is grasped, at first, by the stricture, which becomes firmly fixed for a time; till a copious secretion is poured out from the parts producing relaxation, and widening of the canal; absorption and exhalation, on the free surface, favoring this desired result. The instrument before fixed and firm, is now found loose and moveable. It should then be withdrawn, and a bougie of large size introduced, to remain for a brief period only, to be repeated at suitable intervals of a day, or two, as the case may appear to indicate.

This is a quick method, and if carefully conducted, resolution goes rapidly on. There is great danger, however, of overaction; which may establish inflammation, in place of resolution. There is not only uneasiness in the part by the retention of the instrument, but constitutional irritation may be established, which, if possible, ought to be avoided. Should either one proceed to excess, the instrument should be withdrawn. The time it may be retained varies very much in different persons. Longer than a few hours will not be tolerated by some; in others, it may remain for days without any serious inconvenience being manifested. Should opiates allay the pain and irritation, and all unfavorable symptoms be averted, the catheter's stay need not be regulated by any fixed time; but, whenever it becomes loose it should be at once removed. In this way more can be accomplished in a day or two, than under the ordinary mode of management in as many weeks.

It should be borne in mind, however, that it is not free from danger; in consequence of which, it should never be attempted but in the more unmanageable forms of stricture.

There is another class of strictures through which a bougie can not be passed; or if partly permeable, some unfavorable circumstances may arise during the treatment, rendering prompt action necessary to relieve detention. The patient should be brought under the influence of chloroform and placed in the position for lithotomy; a catheter of medium size is then introduced and passed down to the stricture; and its point is cut upon by direct incision in the center of the perineum. Behind the stricture is almost always found a dilatation of the urethra, which is pierced by the knife, affording relief. Then the stricture is separated accurately and thoroughly. After which, a catheter is introduced and retained; in this way, a most effectual beginning is made towards a permanent cure. The operation is difficult—the dilated portion not very readily found; but when skillfully performed may rank among the best operations in surgery.

The catheter should be retained as long as the feelings of the patient will permit; it may then be removed for a time, till irritation shall have passed away, it is then re-introduced and retained for the purpose of preventing contraction of the canal, till the external wound shall have closed. The bougies to be used at intervals, as the indications require, till a complete cure is accomplished.

Another mode, in case of tight stricture, is to make an incision from within the canal, by the employment of a concealed lance in a catheter. The lance, however, is a dangerous instrument to use, and suitable only to strictures anterior to the suspensory ligament. In such cases, and in the hands of a skillful operator, it will be found a valuable instrument.

Stricture involving the orifice, callous and unyielding, may be removed sometimes by probes, or short bougies, introduced at intervals; but, it very frequently requires to be incised; followed by bougies at suitable intervals, as in other cases. The scarifying may be done either with a narrow pointed bistoury or an instrument like Mr. FERGUSON'S. It should be understood, however, that there is one important objection to the use of cutting instru-

ments. It is the contraction of the cicatrix, which may leave the parts in a worse condition than before the incisions were made.

For the same reason, the caustic bougie has fallen into partial merited disuse. To prove successful as an escharatic, it must act and ever destroy the mucous membrane; and for a time, ample space is obtained; but, in the end, contraction is sure to follow; partly by the plastic deposit which surrounds the ulceration, and partly by the contraction which invariably accompanies cicatrization. The proper use of the caustic bougie, is a corrector of irritation, and not a destroyer of the parts.

It is supposed that strictures which dilate under the use of the bougies, but contract and soon become tight as before, depend on an unusual degree of irritability of the canal; which may be materially improved by the application of nitrate of silver, conjoined with the use of bougies, and an appropriate general treatment.

The best mode of treating obstinate permeable stricture is by perineal incision; first introduced by Syme, and known as his operation. The patient is placed in the position for lithotomy and deep in anesthesia. A small grooved staff is introduced through the stricture, and retained by an assistant; while the operator makes an incision along the raphe of the perineum, about an inch and a half in length; then, a probe-pointed bistoury is introduced through the wound and into the groove in the staff, beyond the stricture, and drawn forward, separating completely, by anterior incision, the stricture. The staff is then withdrawn, a catheter introduced and allowed to remain for several days. The external wound soon heals. The after treatment conducted as in other cases involving perineal incision. The bougies are used and relied upon as dilators after the withdrawal of the catheter. By this mode, the patient is relieved of a malady threatening dissolution, at an early day, which is as prompt as it is successful.

W.

HABITS OF MECHANICS AND THEIR EFFECTS ON HEALTH.

THE shipwright and caulker, exposed to the heat of summer and the cold of winter, are longer lived than the cabinet maker and joiner, whose labor, although not unhealthy, confines them within. In the list of out-door occupations is that of the butcher, which on account of the noisome atmosphere of the slaughter-house, might be considered unwholesome, is, on the contrary, one of the most healthy of mechanic arts. The habits of the butcher, as is well known, is to be much in the open air, on horse-back scouring the surrounding country, and frequently extending his rides to a considerable distance, in search of material for his shambles.

The life of the butcher is rendered shorter than it otherwise would be by his indulgence in high living, which gives him an appearance of jocund health, very different from that of many tradesmen, but at the same time predisposes to congestion of the blood-vessels, especially of the head and abdomen, and often shortens his days at the very moment when he seems to be in the enjoyment of the best health. A full habit and and florid countenance are just as natural to him as a spare form and pallid face are to the baker.

Bakers are not only confined much within doors, but are likewise subject to exposures incident to their trade. In common with the miller, they are liable to an irritation of the skin by constant contact with flour, which occasionally produces a variety of scaly eruptions, termed psoriasis; but the greatest injury to health is induced by the high temperature of their workshop, which seldom falls below 90 deg., and frequently exceeds 100 deg. Confectioners are subject to the same influence, and suffer accordingly: besides the inhalation and constant tasting sugar is so destructive to the teeth, that it is rare to see a confectioner with a good set of teeth: and nothing is more common than to meet those who have lost, at an early age, nearly every tooth by decay. Among household domestics, cooks who are exposed to the heat of the fire, are more liable to disease than the ordinary housemaid.—*Hunt's Merchants' Magazine.*

CURE FOR BURNS, ETC.

BY WM. S. MERRELL, M. D.

The following formula was devised by me twenty-five years ago, and abundant evidence and numerous certificates, if necessary, might be adduced to show its great superiority over all other preparations in use, for the cure of *burns, scalds, chilblains*, and also of erysipelatous eruptions. I have never attempted to make a "patent medicine" of it, but now for the first time give the prescription to the public, and submit it to the criticism of the profession:

Ceratum Plumbi Anodynum.

Anodyne Cerate of Lead.

"*Merrell's Fire Extractor.*"

R. Emplast. Plumbi	-	-	-	-	-	3	16
Ol. Terebinth. Rect.	-	-	-	-	-	"	3
Ol. Origani	-	-	-	-	-	"	6
Ol. Lini	-	-	-	-	-	"	2
Tr. Opii	-	-	-	-	-	"	2

Melt the Emp. Plumb. and Ol. Lini together, at a heat not above boiling water, add the Tr. Opii, and stir till the spirit and water are evaporated, and the opium evenly diffused. Then when sufficiently cool, add the essential oils, and stir until the whole is stiffened into a smooth cerate. It should be kept closely corked in wide-mouthed bottles to prevent the evaporation of the volatile ingredients.

Application—Spread the cerate smoothly over the injured parts till the surface is completely covered (for which purpose the finger is the best instrument,) and then lay over it a thin bat of raw cotton. It adheres closely, and will keep its place on any part without bandages. The raw cotton is preferable to any woven fabric, because it adapts itself to the irregularities of the parts, and admits of free motion without rucking or drawing. All smarting will usually cease in ten or fifteen minutes. This dressing should, in most cases, be left undisturbed till the healthy action of the parts is completely restored, and all soreness and tenderness removed. If the part is not blistered, this will require but a

few hours, say eight to twelve. But if the cuticle is raised, and blisters are felt, the water should be let out by passing a needle through the dressing without removing it. In case, however, the burn at any point should be so severe as to entirely disorganize the tissues, so that vitality cannot be restored to them, at such places will pain again commence after some eight to twelve hours—not the smarting of a burn, but the heavy *aching* of a wound. Then the cerate should be removed from such parts, which may be done by softening it with warm oil, and poultices applied till, by supuration and healthy granulation, the wounds are healed.

The above prescription and treatment are founded on the following pathological views:

In injuries by heat, the fluids in the capillary vessels of the skin are expanded and the coats of those vessels distended. The stimulus is excessive, and the sentient nerves give warning of the injury by the intense pain that is felt.

When the heating substance is removed or cooled down, the smarting for a few moments ceases. But there is soon a reaction, the muscular coats of the capillaries are relaxed, and their vitality partially if not wholly destroyed. They fall into a state of *atony*, and now the red blood, which is designed only for the veins proper, flows out into these capillaries, and hence the redness and turgescence which supervenes.

The red blood in its turn becomes an irritant, to the sentient nerves, which complain of this violation of the order of their organism, and smarting pain again ensues.

But this inflammation is *passive*, not *active*—one of *atony*, not of over-action. If, however, the burning has not been carried so far as to *destroy* the organism of the parts, the vitality may be restored and the injury healed. Now, how can we best do this? If we apply cold to the parts, the capillaries are contracted and the fluids thickened, and thus the blood is kept back from them, the irritation prevented, and temporary ease obtained. But this is palliative, not curative, except in small burns, where by the continued application of cold water, the vessels become permanently contracted and resume their functions. But in extensive injuries of this kind, healthy reaction cannot be thus restored, and death and sloughing of the parts, if not fatal consequences, would ensue. Another course must, therefore, be pursued. We must

stimulate the prostrated tissues to such a point as will enable the vital powers to resume their action, and the capillaries to perform their proper functions, and we must keep up such stimulus till such action is established. This is done by the ordinary medical treatment, of dressing the parts with oil and lime, or with white-lead and spirits of turpentine, or with some of the many liniments or embrocations which are recommended as certain cures for burns. It is done in small burns by holding the part to the fire till the "fire is drawn out," and by various other means, all accomplishing in a more or less perfect manner the same object.

But they do not accomplish the object in the best manner. They all have to be *removed*. When the suspended vitality is restored by their stimulus, or in common parlance "the fire is taken out," they must be replaced with poultices or some emollient dressings. Such removal often abrades and injures the new tender tissues, and the injured parts are repeatedly exposed to the air, which, especially to those denuded of the cuticle, is an injurious irritant.

The above cerate entirely obviates these objections and better accomplishes the end desired.

1st. The Diachylon plaster and oil form a sedative, unirritating coating that adheres closely and keeps its position, and perfectly protects the surface from the air.

2d. The essential oils stimulate the vascular tissues and restore their vital action, but being entirely volatile, as that vital action is more and perfectly established, this stimulus is gradually diminished, (and not all at once removed as in the case of other popular dressings)—until the oils being dissipated by the warmth of the parts, an emollient soothing dressing remains to perfect the cure. Instead of having to change the dressing, the dressing gradually changes its own character just as the indications of cure require.

The opium is added to allay the nervous irritation and the quicker to remove the pain.

Other essential oils might doubtless be substituted, and other compounds devised, founded on the same principles, but we doubt if any will surpass, if they can equal this.

This cerate is equally applicable to frost-bitten parts and chilblains, where the pathological condition is almost identical with that of scalds.

It is also found valuable in erysipelatous eruptions, and indeed is applicable to all affections of the skin accompanied by turgescence and *smarting* pain.

PRIMARY SYPHILIS — PHYMOSIS — FERRUGINOUS TREATMENT.

BY R. RICHARD CLAY, M. D.

AUGUSTINE T——, aged twenty-two, seaman, contracted chancre six weeks ago. He consulted me on the 11th of May; attempted to reduce the phymosis with the ordinary means, but without success.

13th—Much worse. On account of the extent of the disease, I concluded that it would be best not to perform circumcision, but divide the prepuce on the dorsal surface in order to uncover the glans. I did so, and found the prepuce and glans almost one complete mass of indurated chancre; cauterized, with solid nitrate of silver the cut edges and the entire surface of the glans and prepuce; ordered the constant application of cold water, rest, and the following:

R. Fl. Ext. Podophyllum,
Aq. " Senna, āā ʒ ss. M.

One-half to be taken immediately, the remainder in four hours—operated slightly.

14th—Enormously swollen; take four pills composed of Podophyllum, Leptandrin, and Oleum Tiglii; operated five times, briskly; take two tea-spoonfuls of the following three times a day, and apply the same as a lotion, on lint, night and morning:

R. Ferri et Potassd Tart., ʒ j,
Aqua Destillata, ʒ vi. M.

Apply cold water constantly; rest and generous diet.

15th—Slightly improved; discharges freely; cauterized raw surface with nitrate of silver; continue treatment.

16th—Much better; discharge less; œdema very much subsided.

18th—The chancres on the glans have contracted to about a third of their original size; those on the prepuce also improving;

œdema less ; discontinue the cold water, and continue the internal and external use of the iron.

19th—œdema about the same as yesterday; touched the chancres with nitrate of silver; reapply the cold water ; continue the use of the iron.

20th—Improving ; able to take three glasses of porter daily ; continue the treatment.

22d—Chancres on the glans have healed, excepting the one at the frænum, and that has contracted to about one-fourth of its original size ; discharges but a very little ; œdema subsiding slowly ; continue treatment.

24th—Touched the chancres with nitrate of silver.

25th—As he does not wish to take the porter, I ordered him to discontinue it.

27th—Not so well ; he did not call yesterday to have the penis dressed. (I have seen to dressing it myself daily since he first consulted me.) I inquired the reason ; he replied, "Because I was obliged to go to stool every half hour, yesterday." This I doubted, and inquired if he hadn't been drinking, to which he gave a negative answer ; but finally acknowledged he had imbibed a very little, his "chums" having induced him to do so ; the fact is, he has been on a "sprees," and neglected to take his medicine or have it applied externally.

29th—Much better ; continue the use of the iron ; discontinue the cold water.

June 2d—Chancres all healed, with the exception of the one at the frænum, and that has contracted to about half the size of a half dime ; the cut surfaces are healing rapidly.

6th—Chancres all healed.

9th—Discharged perfectly cured.

The employment of the potassio tartrate of iron in the treatment of primary syphilis is no novelty. It was recommended by RICORD in the treatment of phagedaenic chancre, ten years ago ; and more recently by Mr. ACTON and Mr. BEHBEND. The treatment must, however, be modified according to idiosyncrasy—there must be an identity of treatment to meet an identity of disease.

There is nothing more embarrassing to the young surgeon than to be called upon to treat a case of primary syphilis. An eminent surgeon has truly said : "His experience alone is sufficient to

guide him ; and if he turn to the pages of the authorities on the subject, he will find such a mass of contradictory arguments and directions that he will be lost in the maze of opinions, and be eventually compelled to strike out a course for himself. In the treatment of this, or of many other diseases, we put too much faith in tradition, and are mercurialists or non-mercurialists—not so much because we can give a reason for our belief in either system, but because the one we follow was the doctrine of the school in which we were educated, and is that of which we have the most experience.”

[Communicated for the A. M. Journal.]

CEREBRO—SPINAL MENINGITIS.

REPORTED BY J. WATSON, M. D.—CASE 2D.

THE object of this communication is to show, to some extent, the different forms the disease (spoken of by me, in a former communication) assumes, and the different tissues affected by it.

The case under consideration at present, is of the same class, yet assuming a different type.

Permit me to state, that in all congestive cases of this strange malady, there is much billious derangement, so much so, that many Physicians are disposed to term it a billious disease.

Although the first symptoms developed in many of these cases are those of a cerebral character, yet often pure congestion, without Fever or Inflammation is found to exist, when, if relief is not promptly administered, the patient becomes pulseless, with great loss of vitality and general nervous prostration, sight and hearing indistinct, and death soon closes the scene.

But the case: Was called, April 19th, 1857, to see G. F., of Clockville, Mad. Co., distant seven miles, and on my arrival, and inquiry respecting the case, found the patient had been complaining 24 hours, but no symptoms arose which alarmed the friends until evening ; at which time I was called ; when delirium, with some fever, retching and picking at the bedclothes, with some dilatation of pupils, had taken place, together with an excessive and unnatural action of the heart ; the heart had no abnormal

sound, but a peculiar rolling motion, which extended to the abdomen, nearly amounting to abdominal respiration; pulse 115 per minute.

The result of my diagnosis was, that congestion and inflammation of the membrane covering the spinal cord, (*Theca Verbebralis*) existed.

The friends had succeeded in producing perspiration, had also applied mustard drafts to the feet, directed a Sinapism of the same about 4 inches wide, and of sufficient length to extend from the nape of the neck to the lumbar region, to be applied along the spine. Gave at the same time a powder composed of

Podophyllin, grs. iij.

Macrotin, gr. ss.

Prepared the same dose in two hours, and in two hours more, gave a teaspoonful of Anti Billious Powder or Physic of the following formula—

Jallap Pulv., ʒ iij.

Alexandria Senna, ʒ vj.

Peppermint Plant, ʒ iij. Mix.

and repeated the same dose every two hours until free catharsis was produced; gave at intervals when restlessness existed, a powder composed of

Carb. Ammonia, grs. iij.

Gum Camphor, gr. j.

Gave also every two hours a powder composed of

Ippecac, grs. ij.

Sup. Carb. Soda, gr. j.

April 20th. Free catharsis had taken place, delirium less, action of the heart subsiding, considerable irritation, in the region of the spine, pulse 86, tongue moist, with red streak through the center, coated on each side, same as last evening, patient much more quiet, kidneys free; continued the Fever Powder and Carb. Ammonia as before, when restless, gave the following—

Podophyllin, grs. jss.

Macrotin, gr. ss.

which had the effect to move the bowels in the afternoon; continued the Sinapism to back and feet, with cold application to the head.

April 21st. Pulse 76, skin still moist, mind clear, complained

of some headache, but little pain in the back and shoulders; tongue less red, coating less; bowels and kidneys free, pupils natural with less intolerance of light. Continued the same treatment as yesterday, taking care to keep the bowels free by the use of Podophyllin.

April 22d. Patient rested well during the night, pulse 72, skin soft, tongue nearly clear, pain in the head subsided, all the unpleasant sensations complained of in the head, was that of fullness and lightness, appetite returning, patient able to sit up a little, secretions all active. Gave a solution of Ipecac, Soda and G. Accacia, with directions to give a powder of Podophyllin often enough to secure at least one evacuation each day; which treatment was continued for a few days, with quiet and retirement, and which fully restored him to his former health, and he is now about his business as before.

Remark: The above treatment has been rigidly pursued in over thirty cases, with variations only to fill the different indications, and which has been successful in all but three, which cases I did not get to until the vitality of the system was so much exhausted, that I entertained no hopes of them, when I first saw them, two of whom lived but two or three hours.

NIGHT SWEATS.

DR. ABBOT, of Boston, publishes a series of cases of phthisis to show the decided influence of the oxide of zinc in relieving the night sweats, which are so troublesome in the latter stages of this disease. His favorite prescription is four grains of the oxide of zinc with three of extract of conium, in two pills, at bedtime. Hyoscyamus and opium are sometimes used in combination with the zinc. One of the good effects is the preservation of a soluble state of the bowels. Dr. A prefers the oxide to the sulphate of zinc.

GLYCERINE IN PHTHISIS.

PROFESSOR N. S. DAVIS, in the *Northwestern Medical and Surgical Journal*, says on this subject: "For cases of tubercular disease in its early stage, before the cough is accompanied by much expectoration, we frequently prescribe—

R. Glycerine, ʒ ij.

Iodide of Potassium, ʒ i.

Sulphate of Morphine, grs. ij

Mix, and give one teaspoonful before each meal and at bed time.

If the disease is farther advanced, and expectoration more copious, with rapidly increasing emaciation, we prefer the following—R. Glycerine, ʒ ij; syrup of iodide of iron, ʒ ss; sulphate of morphine, grs. ij. Mix, and give one teaspoonful every four or six hours.

It is now two years since we commenced using the glycerine in the treatment of phthisis, generally combining it with some preparation of Iodine, and just enough morphine to allay cough and promote rest; and we have certainly derived more benefit from it than from any other one remedy.—*St. Louis Medical and Surgical Journal*.

CHLOROFORM IN SEA-SICKNESS.

It is said to have been discovered that chloroform in doses of ten to twelve drops, repeated as occasion requires, is a specific for sea-sickness. Out of twenty passengers, eighteen were cured by a single dose, and the two others by two doses each.

FETID PERSPIRATION FROM THE FEET.

THIS will generally be relieved by washing the feet night and morning in salt water, and afterward applying a little olive oil. (B. W. RICHARDSON).

The best effect will be produced by bathing the feet at night in a strong solution of subcarbonate of soda.

Editorial.

THE AM. MED. COLLEGE.

It is quite in the order of precedent to offer in the editorial columns, notices of institutions that may be under the patronage of such papers ; and as at the present juncture, approaching the time when announcements for the Winter Lectures are usually given, it may be entirely proper here to offer some thoughts in reference to our College.

Within the last year the number of Colleges claiming to be of the Reformatory and Progressive class, has been on the increase, and it had been conceded, and is still conceded, that disproportionately extended efforts of this kind, when so circumstanced as to occasion *competition*, these efforts, instead of proving beneficial, must, according to ordinary events, tend to hazard the legitimate objects of institutions of learning. It may be remarked that this fact will not by any means prove the wisdom, nor the honorable disinterestedness of the parties engaged in these extended measures of College enterprise.

Now, the facts involved above, being somewhat notable, it is quite proper that the position of the A. M. College should be defined and known, as it relates to these facts.

First, then, it should be known that when this College was Incorporated, it was the second only of its kind then existing in the State, having corporate authority.

Second, That whatever might obtain in the way of *competition* to the other institution, it was by no means the object of the officers of the A. M. College to offer any aggressive *opposition*. Nor have the Faculty generally, at any period, evinced a disposition of unfairness, or even discourtesy. But, on the other hand, the following was adopted as their motto : “ *Medical Independence ; Medical Toleration.* ”

This Institution has now been in successful operation eight sessions, constantly increasing in patronage and gaining the con-

fidence of the profession and the people. Being at peace with all, and having its basis in an excellent Constitution, and cherishing in its principles the inculcation of truth, the extension of sound practical knowledge, and in its policy offers kindly courtesies toward all; the question arises whether the American should even under the fullest sense of the impropriety of attempting to keep up so many Colleges in one place, be the one which should first give way?

The question might be put in another form. It might be inquired of the profession whether *they* are willing to see an institution having such claims, and such prospects, and whose conductors are industrious, nay, *indefatigable* laborers, and who consider it much more desirable to be useful and to commend their institution by the achievements of industry, science and genius, rather than by any effort to the disparagement of others; will the profession consent, that such an organization should fail to receive the fullest encouragement?

The cabinets of the American are fine—its apparatus good, and its lecture rooms commodious, and what is particularly important, the Institution is not the subject of any pecuniary liabilities, so as to be endangered to embarrassment.

A matter of some little satisfaction is that a few persons unfriendly to this College, who had predicted unfavorably as to its destiny, and had also made some efforts to institute an influence against it, have now, either because such predictions or efforts would in our present prosperity be simply *ridiculous*, or perhaps—and which our charity leads us to hope—they have really improved in their sense of moral justice, they appear to be friendly and even, in some respects, courteous toward us. Gentlemen, we hope *ever* to merit your respect.

We then say in conclusion, that we are still resolved to be in the line of duty and progression. We will stand by the American until its high mission shall be accomplished.

Our next, our ninth session, will commence on the 15th of October next, 1857.

K.

OBITUARY.

At a meeting of the Faculty of the American Medical College, held Thursday the 16th, in College Hall, the mournful announcement was made to the board, by one of its members, that Prof. JACOB SNYDER had departed this life. Thereupon, the following preamble and resolutions were read, adopted and ordered to be published :

WHEREAS, Having received the mournful intelligence that our much esteemed and highly respected colleague, Prof. JACOB SNYDER, departed this life, at his residence, Dublin, Ind., June 10th, 1857: it becomes our painful duty to notice the melancholy event which has deprived us of one of our co-laborers, who was among the nearest and dearest in our affections—one whose sole object and aim was the advancement and improvement of his chosen profession. That he might do more for it, he left a lucrative practice to assume a more prominent, if not a more responsible position, which opened a wider field for the exercise of his versatile talents, in which he proposed to labor for years, unfolding each session the mysteries of the profession, and placing in the laps of his numerous hearers, the fruits of an industrious and well spent life. He had entered upon his laborious duties, and filled the chair of Surgery, during the past winter, in a highly satisfactory and honorable manner. To the many intelligent students who had the pleasure of attending the American during that winter, and the numerous friends of the College, this notice will carry with it regrets that he who promised so much, should have been cut down in the very midst of a useful, brilliant and glorious career.

Resolved, That it has pleased an all wise Providence to remove, by death, from our midst, while in the vigor of manhood and professional devotion, Prof. JACOB SNYDER, whose attachment to his profession and friends has thus been prematurely severed, and a bond of union obliterated which death alone could effect.

Resolved, That in the death of our lamented colleague, the Am. Med. College has lost a member of acknowledged moral and professional worth—his associates a professional companion whose social qualities endeared him to all, and the public a skillful and successful practitioner, to whom his services were far more valuable than gold or the most costly diamonds.

Resolved, That we tender to the widow, children, and numerous relatives of the deceased, our sincere sympathy in their affliction and irreparable loss, and trust that He who controls the destinies of us all, will support and sustain them during their tribulations.

W.

CHLORIDE OF ZINC IN THE TREATMENT OF CANCER.

DR. EDWARD S. HAVILAND, who has been engaged for some time past in the treatment of cancer by the process of enucleation, under the use of chloride of zinc—an escharotic long known to the profession—gives (*Lancet*, Feb. 14, 1857) the following brief result of his experience with this mode of preparing and employing the article:—

The caustic chloride of zinc is prepared “by making it into a thick paste with any absorbent powder, such as gypsum, flour, starch, or the powder of althæa, or gum acacia; and I find the proportions necessary are either equal parts of the chloride and powder, two or even three of the former to one of the latter; or, what I prefer is, a mucilage of the present gum Arabic, made as thick as possible, or sufficiently viscid and glutinous to prevent its running, as, on account of the highly deliquescent nature of the chloride of zinc, it is apt to run over the sound healthy skin, which it destroys almost with equal facility as the diseased structure, though a contrary opinion prevails. The preparation may be colored with any vegetable coloring matter, which permeates into the subjacent tissue, indicating the depth which each dressing has penetrated, and materially facilitates the operation of the surgeon.

“Next comes the mode of employing the remedy, which will slightly vary according to whether the skin is unbroken or not. When the skin is entire, having marked out the extent of the disease, apply either the acid nitrate of mercury or strong nitric acid, so as to completely destroy it over the whole surface, in order that the caustic may act more speedily, and after the heat and pain attending the destruction of the part has subsided, next apply the dressing, spread on calico or lint, the shape and size required; and over the whole apply a portion of wadding or cotton wool, to protect it from cold and to absorb any moisture occasioned by the running of the dressing. The parts around, and especially below, should be protected from the action of the caustic, by a thickly-spread dressing of spermaceti ointment, holding as much chloroform mixed in it as it will take up, which will at the same time tend to allay the burning and pain during the

action of the escharotic. Sedatives may be given with the same object, such as pills composed of opium, the compound soap pill, Battley's solution; the state of the system being attended to, and the patient encouraged to take a generous diet, with wine and malt liquor after the first few days. At the same time, the constitution should be improved by administering cod-liver oil, and the different preparations of steel and quinine, especially the iodide of iron; and the iodide of arsenic may be given in combination with hemlock, with a view, if possible, to alter the cancerous diathesis. The following day a whitish eschar will be seen, through which incisions to the depth of the part destroyed should be made vertically through the tumor, and dressings spread on narrow strips of lint or calico should be carried to the bottom, and the same should be continued daily until the whole is destroyed, which will be in twelve or fourteen days, after which the dressings may be discontinued. The tumor will thus be enucleated in about thirty days from the commencement, leaving a granulating healthy surface, which will heal most rapidly with the ordinary resin dressing or the dry cotton wadding.

"In case of an ulcerated or open cancer, the dressing may be applied at once, spread on calico or lint, the shape and size of the sore, which may afterwards be treated with incisions in the same way as that where the skin was intact.

"Having made these general remarks I will now conclude by giving a short history of one of my cases in illustration of this mode of treatment:—

"Mrs. D——, aged forty-eight, the mother of ten children, a spare, thin, and emaciated person, has a hard, circumscribed tumor in the right breast, with considerable surrounding infiltration, having all the characteristics of confirmed scirrhus, free from attachment, and nipple not retracted; feels sharp, darting, and lancinating pains shooting through the tumor, extending to the glands in the axilla, which are much enlarged. A small hard swelling was first perceived about eight years since, the origin of which she attributes to a blow. Until two years ago the enlargement was very trifling, when the catamenia ceased, but since then it has increased most rapidly, and the pain, which was at first very inconsiderable, has been much more severe in its character. The health is very materially impaired, though no very

strongly-marked cancerous cachexia is observable in her countenance. There is no hereditary predisposition; but she has lost a sister by consumption.

"*Dec. 3, 1856.* Commenced to destroy the skin over the full extent of the surface of the tumor by the application of strong nitric acid, the heat and pain of which having subsided, I next applied the escharotic, prepared and spread on linen (as described) over the part to the extent of which I had destroyed the skin, over which I placed a portion of cotton wool, and left it until the following day, prescribing one grain of opium every four hours to allay the pain, and to commence with one pill three times a day, composed of one grain of iodide of arsenic; twelve grains of sulphate of quinine; twenty-four grains of extract of hemlock: mix and divide into twelve pills.

"*4th.* The skin over the tumor where the acid and dressing had been applied being perfectly destroyed, I made several vertical incisions from above, or the top part of the tumor, to the bottom, merely through the skin, as deep as the deadened part, when narrow strips of linen, spread with the dressings, were pressed down by means of a probe, to the bottom of the same. On account of excessive debility and exhaustion, cod-liver oil was ordered, together with some steel medicine, with full meat diet, wine, and porter.

"*5th.* The incisions deepened, and the dressings applied as before. This was repeated daily till the

"*17th.* When I found I had reached the bottom of the diseased structure, from which time they were discontinued. The line of demarcation between the dead and living part was now very perceptible, and it afterwards became gradually more defined, until the entire separation around the tumor took place.

"*Jan. 4, 1857.* The thirty-second day after the commencement of the treatment, the tumor was enucleated entire, weighing at least a pound and a quarter, during a part of which time she suffered severely from influenza and bronchitis, which greatly retarded its progress. On the detachment of the tumor, a healthy granulating surface presented itself, which has since continued to heal most rapidly under the use of the ordinary resin dressing, and at the same time her health has most remarkably improved."

[The external application of zinc, as a caustic, in cancers, has been favourably tested by numerous members of the profession, in this city, but the use of the mercurials and arsenic, in our estimation, is of doubtful utility. The same indications, for which they are used, may be readily fulfilled by milder means.—ED.]

DIABETES.

Opium has a most powerful effect in diminishing the quantity of urine, but does not cure the disease. *Ammonia* in some cases has the power of reducing the urine, the specific gravity, and the quantity of sugar. *Cod-liver oil* improves the general condition of the patient, and reduces the urine. The combined use of cod-liver oil, opium, and ammonia, effects the most prompt and permanent benefit. *Blisters* to the hepatic region are useful. A *mixed general diet* is the best; restriction is rather baneful than beneficial. (Dr. J. BELL.)

PHYMOSIS.

TAKE a long slightly-curved needle, with its point guarded by a bit of wax; introduce this at the orifice of the prepuce, carry it back as far as possible, and thrust it through the foreskin, with this raise and draw forward the prepuce, apply the forceps between the needle and the glans, and excise with one stroke of the bistoury. The cut edges of the skin and mucous membrane exactly correspond, and must be accurately brought together and secured with fine silk sutures. (Mr. T. B. CURLING.)

PAYMENTS NOT ACKNOWLEDGED.

OF ONE DOLLAR.—S. C. SHEWMAKER, Ind.; J. W. ALLEN, Mich.; J. B. SNELLING, Tenn.; G. W. THORNBURGH, O.; D. R. MALONE, Ind.; J. HOSTETER, Ill.; E. M. SMITH, Ill.; E. C. COCHRAN, Ill.; A. S. LANCASTER, Me.

Of One Dollar and Fifty Cents.—CUNNINGHAM S. VEATCH, Ill.

THE

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PRACTICAL PHILOSOPHY IN MEDICINE.

A CASE IN ILLUSTRATION.

It has often been remarked that the force of necessity alone is equal to the required exercise of animal being. This is equally true whether we consider the physical or intellectual part of the human being. Every climate has its characteristic amount of exercise or labor among its inhabitants, indicated by the comparative facility by which the necessities of life, food, raiment and shelter are secured. So on the other hand, we find that just in the degree that the prevailing sentiment of any community, as regards intellectual culture and social refinement may be, such is the general standard of labor, or application in this way. The rule seems to be not to perform more labor than the circumstances either physical or intellectual demand.

The writer proposes here to present some practical *analogies* of a professional character. Nor would it be expected that physicians have inherited higher views in this regard. It is indeed a fact that Doctors do not labor, nor even *think* or *study* any more than they should.

This fact is quite suggestive and perhaps the writer may as well dispense with any further premises and at once bring out his case, lest the reader may hesitate taking pains of further pursuit of the subject here.

Nevertheless, one practical fact of a general character must first be noted. This fact contemplates the usual readiness or *hurry* by which remedies are brought forward and prescribed by practitioners.

Some physicians seem to say by their conduct, that they are not required to pay any attention whatever to diagnosis. They appear to think it sufficient for them to know that the patient is sick, for them to pour down their drugs, and it is amusing to observe that many seem really disappointed when they find their remedies under such circumstances ineffectual for good.

Let us for a moment observe the programme of such a practitioner. He arrives at the patient's house, takes a seat, makes a few casual remarks of a social etical character, approaches the bedside, looks at the tongue, feels the pulse and perhaps inquires as follows: How long has the patient been sick? what is the state of his appetite and that of his bowels and the skin? Is he restless, has he had any pain, chills or fever?

The answers to this meager and extremely superficial examination and inquiry will furnish the basis of the treatment. It is determined that he has this or that affection, requiring some certain remedies which are always proper in such cases. The medicine is ordered and the doctor takes his leave, but returns every day to prescribe a definite course which he might, for all that he has now done, have ordered at his office without the form of a visit to the patient.

Now then we will have our special case in point. Mr. E— was the subject of an asthmatical affection; and at an early period availed himself of professional consultation. The patient was bled and was ordered to take a saline draught. On the next visit he being but very slightly relieved and the aperient not having evinced sufficient activity, a dose of calomel was then to be given; but as the pulse was rather more soft and there being no marked febrile tendency, further blood-letting was at that time dispensed with. Syrup of squills, however, was deemed advisable to relieve the labor of breathing.

On the third visit the doctor had been sent for in the night; and he found his patient laboring in a severe paroxysm of the asthma. He was maintained in an upright position upon the bed and when the physician came the case was considered quite

alarming. The face was swollen and dark, and the veins of the neck and temples engorged or tumid, and the eyes red and protruding, while the patient was seemingly on the verge of asphyxia. Breathing seemed to become every hour more difficult and alarming; the Medical Man resolved to have additional council. Dr.—was brought in, and gave it as his opinion that but little hope remained in the case.

Blood-letting, Antimony, Digitalis, Asafoetida, Ammoniac, etc., were perseveringly applied with adjunctive means, such as warm bath and enemata. But little relief was obtained, except transiently while over the bath, before nine o'clock on the following day, when the symptoms were modified and the patient thence gradually improved for some days. A new paroxysm, however, set in, which again was as vigorously met as the former, with but little change of treatment and with about the same result. But convalescence was very slow as there was a regular exacerbation of symptoms at night, which gave way only late in the morning.

In this low and irritable state the patient conceived a notion to be removed from his place, alleging his convictions that as he had formerly been in good health and now being so suddenly attacked on his occupying his new place—it being recently built—he supposed that the lime in the plastering or some other local cause was at the foundation of his disease. His physicians assented, because they were satisfied that their measures were unavailable, and a removal was effected.

It was surprising to all that the disease subsided entirely in a very short time after the change of place. But the surprise was no less, except to himself, when on his return home he was again attacked with asthma, the symptoms being precisely as before.

The remedy now was readily suggested and a removal was effected again with results similar to those on the former occasion. But the singularity of the case now only began to appear. A permanent change of residence was resolved upon, from the conviction now entertained by all, that this special locality was in some way inconsistent with the health of this individual, although no other member of his family was similarly affected by the locality.

The change of his abode, in this case, however, failed to give

him a realization of his hopes. Asthma again set in and the symptoms appeared not in the least modified. New medical aid was now procured and perseveringly applied, but with results not much more encouraging than those which followed his first treatment. The patient was now induced to resort to the place where his first relief was so promptly realized, and in this case, there again, to the surprise alike of himself and friends, relief, complete relief was obtained.

A permanent residence in this latter locality was now resolved upon. His personal effects were removed thence and the new home was contemplated with no small amount of hope and assurance as to the benefits to be gained by this asthmatic subject. But, alas, no sooner was he thus situated in his own domicile than the tormentor again appeared with the usual violence.

The case now became exceedingly interesting to the attending physicians, as it was supposed that something peculiar to his own household, or manners of life when at home, was to be found as the predisposing, or even direct cause of the disease.

Changes of diet, exercise and employment were instituted, but with no apparent benefit!

The denouement, as also the entire history of this most singular case will, no doubt, in the mind of the reader, corroborate the sentiment given in the commencement of this article. More practical philosophy is needed in the medical profession. What would observation of even scores of cases, altogether as singular as this, do for the improvement of the treatment? If no reasoning and philosophy is brought to bear upon such experience, it will be of no avail. Let it be inquired now, what the experience of this case would suggest to be done? Does it indeed develop any course to be pursued in any similar case?

In the case here related things were in the peculiar condition last stated when the professional advice of the writer was solicited; and no man of any pretensions to philosophy could let such a case pass without thorough investigation.

I have found a clear case for the inductive philosophy. The facts were all to be collected and arranged in proper order. Here they are: The subject was a man who before his late asthmatic attack had good health. The disease set in suddenly. The usual remedies were ineffectual, though perseveringly applied.

The only relief obtained was upon his change of place; and on his return he again relapsed. A second removal was alike beneficial to the first. Settling his home and family in the new and healthful locality proved again the presence of the cause of the malady. But all the changes in diet and exercise, as also that of the remedies employed—this latter embracing several of the novelties of the day, as also the skill and experience of reputable men—served in no measure either to remove the disorder or materially to moderate the symptoms. It was now evident in my mind that successful inquiry must be directed to other points; all the facts relevant must serve as premises for induction—these *general* and *varied facts* must, either alone or by the accession of new elements for induction, lead to the *particular* fact to be sought.

It was evident that nothing was to be gained in any endeavors to learn the cause of the difficulty by reference to the specific locality, because that although the first locality was marked by the regular accession or continuance of the disease, yet that must only be considered as a concomitant; and the same principles which bear us out in this, also clear up the inquiry in regard to the *new* locality.

Again the cause seems not to be allied to any of the circumstances which we might expect to be affected by any of the remedies applied in the vastly varied and persevering treatment. In a word, none of the usual points of observation are found to afford any light to clear up the mystery except by *induction*.

What, therefore, all the foregoing facts fail to show *positively* they may present *negatively*.

Now what are the points upon which the facts *per se* have not availed, but which by induction may be made available?

First, the moral and intellectual powers of man exert much influence upon the state of the body, and they often superinduce diseases and especially those of the nervous or spasmodic kind. But in this inquiry nothing is here achieved, for it was found that nothing peculiar to the diseased state existed in the case.

Secondly, the *imponderable* agencies—how are these related to the case? What are the possible circumstances by which any peculiar effect might arise in the case? Is there any peculiar circumstance in texture, quality or color of apparel or bedding? Ah,

what *nonsense!* says the empirical practitioner—do you really suppose that the cause of this violent disease is to be found in a cause so trivial as that which concerns the *texture, quality or color* of the wearing apparel, or of the materials constituting the bed? Yes I do, for I am driven to this by the very fact that the same circumstances which would commonly be cited, here fail to account for the cause.

My mind had thus, by induction, rested upon electrical phenomena as having most probably a relation to the case, and these inquiries were rewarded most happily.

I found that the subject of this disease slept or rested, when at home or in his own bed, upon *new feathers* which are *electrics*, and the bed being insulated must in all cases keep the subject resting on them in an excited state. This in very susceptible cases would occasion, as in the present one, some very notable symptoms, while in less susceptible cases no cognizable effects would occur.

The present case was fully tested. The patient would be entirely relieved from any paroxysm in the course of some hours, or at least during the day, when he was resting upon the ground or other conducting materials; and could never rest upon the new feathers, in an isolated state, without being affected with difficulty of breathing or asthma.

I have observed of late several notices of other cases, in Medical Journals, but none quite so remarkable as this. One case was reported so long ago as 1834 in the *Edinburg Medical and Surgical Journal*.

This forms a new variety of Asthma, which has not yet received a name, and from the very specific character of its proximate cause I would call it *Asthma Electricum*.

Cincinnati, June, 1857.

K.

FEE TO M. PAUL DUBOIS.—There has been much speculation as to the amount paid to M. P. DUBOIS for delivering the Empress of the French. From a paper published in Paris as to the expenses of the Emperor last year, it appears that M. Dubois received nearly fourteen thousand dollars.

URINOUS ABSCESS AND URINOUS FISTULA.

URINOUS Abscess implies, in this connection, a condition of the parts in which an abscess is situated having communication with either the bladder or urethra, and containing an admixture of pus and urine. The causes which give rise to or establish this condition of the parts may be divided into external and internal. An abscess may form externally to the urinary passages from injuries received from without, or by the irritation of stricture impeding the free egress of urine, or by stone retained in the bladder, irritating the parts and frequently obstructing the passage from within. An abscess thus formed, during its progress of development and enlargement, may open either into the bladder or urethra, according to its position, then through the ulcerated opening urine finds its way. The urine acts upon the internal surface of the cist, irritating its delicate tissue; which irritation soon kindles into blaze a fresh amount of inflammatory action. Should this advance as rapidly as it frequently does, ulceration of the tissues composing the boundaries of the original abscess and, as a consequence, sloughing follow in rapid succession. Should the pyogenic membrane remain complete, which is frequently the case, and in some instances even strengthened by an acquisition of plastic material exuded from the tissue, the urine escaping from the bladder is retained in the cist, which aids in establishing Urinous Abscess and becomes the stepping stone to Urinous Fistula. The abscess may assume, as it frequently does, a chronic character, though its ravages in general are more actively carried on than an ordinary acute abscess, passing rapidly to the surface and giving exit to the dark colored, thin and fetid contents.

In other instances, and perhaps the more frequent, the affection originates in ulceration of the lining membrane of the urethra or bladder, extending its ravages to the adjacent parts. Laceration and acute ulceration of the mucous lining is liable to occur from retention of urine by stricture. In that event the most common danger becomes especially great; the thickened and powerful middle coat of the bladder laboring hard to overcome the obstruction renders solution of continuity the more likely to occur.

The patient may have been in the habit for a long time of making water tardily, attended with efforts to expel the urine, and at last the passage seems effectually closed, the ordinary distress incident to this condition of things supervenes. Perhaps by investigation the exciting cause will be discovered to be indiscretion at table ; or the injudicious use of the bougie or catheter ; exposure to the vicissitudes of the weather ; or what is sometimes supposed to be the exciting cause, an attack of piles. The canal previously narrowed has now become closed by congestion, or by the swelling accompanying an active inflammatory condition of the parts involved, which may be and sometimes is accompanied by spasm. Under the powerful contractions of the hypertrophied muscle of the bladder, the parietes may give way and the rapid escape of urine follows as a consequence, giving rise to a form of extravasation the most formidable. A more gradual process may be established, and the vitality of the parts overcome, the urine at first escaping drop by drop, or a few drops may pass at once, giving rise to an inflammatory process of a stenic type, the abscess formed having all the ordinary characters incident to such a state of things, the plastic exudation surrounding it not excepted.

Before the establishment of ulceration, it will be found that in many instances an inflammatory process had been slowly but steadily progressing in the tissues exterior, which had to a great extent consolidated prior to the period when urine first escaped. And as it has already been stated, the origin may not have been ulceration, but violence applied to the parts resulting in contusion or laceration, inflicted by the bougie, catheter, or indeed any instrument in the hands of unskillful persons.

The term Urinary Abscess, in its general sense, is understood to refer to the urethra. Its most common origination is from within, and its most common cause, stricture. The point of ulceration may be either immediately behind the stricture or at some distance from it. The most common place is in the perineum. It is recognized by a hard swelling beneath the finger on pressure ; the ordinary symptoms of stricture are soon made manifest, and soon undergo aggravation ; shivering and febrile disturbance soon become apparent, and in some cases, by pressure applied to the abscess, retention of urine follows and remains

so long as the pressure is continued. The treatment consists in making a free incision for the exit of matter and urine; this, however, is merely palliative, not curative. Unless the removal of the cause, the stricture, by the means referred to in an article on stricture in a previous number, abscess will constantly return and the little remnant of strength left will gradually but surely decline till life's last thread is worn through. To refer again to the curative measures, they may be summed up in a few words as follows: bougies of various sizes, from the smallest to the largest, made of polished steel, should be relied upon; each one gently introduced, commencing with the smallest and increasing the size, each time, till the largest bougie enters freely; which should not be introduced oftener than once a day, or once in two days, or not so frequently; always introducing the same sized bougie that was introduced the time previous, allowing it to remain in contact a minute or two only, it should then be withdrawn and a size larger substituted and retained from a minute to half an hour, as the case may be, to be decided by the feelings of the patient; providing, however, this mode should not be found successful, as it will not in cases of long standing, in that event a more heroic plan must be instituted, which has for its object the separation of the undivided stricture. The patient should be placed in the position for lithotomy and chloroform administered, as in that operation, and while under its influence an incision should be made in the central portion of the perineum about an inch and a half in length; a grooved staff should first be introduced and retained in the urethra. The incision should be made deep so that a probe-pointed bistoury could be introduced beyond the stricture, and into the groove in the staff, when it should be drawn forward, with its sharp edge upwards, separating completely the stricture; after which a silver catheter should be introduced and retained in the urethra, made fast around the body of the patient by strings attached to the rings of the instrument, and the orifice secured by a cork fitting accurately, which should be removed as often as required to allow the accumulated urine to escape. This instrument should remain in sight for several days, and when removed the bougies may be used as in an ordinary case of stricture, till complete dilation is accomplished. After which bougies may be used to advantage for months, at distant intervals of a week or two, or not so often.

URINARY FISTULA.

URINARY fistula may be the result of traumatic injury implicating the urethra. It is more frequently, however, the result of urinary abscess opening spontaneously in the perineum, affording temporary relief to the symptoms of both abscess and stricture; but, by the persistence of the latter, obliteration and cicatrization of the abscess are suspended; the irritation of the stricture maintains and keeps up a morbid degree of excitement, and the obstruction which it gives rise to forces the urine into the new but preternatural channel; in consequence of which, the abscess does not close but partially contracting degenerates into a narrow passage called a fistula. There may be but one of these pipes, or there may be several traversing the perineum or scrotum, or the parts adjacent. It is not uncommon to find abscess burrowing beneath the fascia of the penis and opening in the vicinity of the glans; in other cases it may terminate on the dorsum of the organ. A single abscess may have more than one outlet which may give rise to as many fistulas pipes; or one abscess may be accompanied by a single fistulas opening. The discharge which the abscess gives rise to is thin and of a gleety character, often very copious. In other cases a constant discharge of urine takes place; in others again, urine escapes only during an expulsive effort on the part of the patient. The surrounding parts are tender and more or less excoriated; the patient in consequence is in a constant state of uneasiness, and very frequently his general health is found very much impaired.

The treatment is simple and in many instances successful. It ought not to be directed, however, to the fistula in the first place, but to the stricture with a view to remove the cause; that being accomplished, then the fistula should receive that attention to which it is entitled. The stricture having been dilated, either by the bougie or the knife, the urine finds its way along the normal canal, the fistula contracts and dries up, and in many instances it wholly closes without any direct treatment having been instituted. In case contraction should prove tedious and incomplete, injections of caustic solutions should be used to slightly stimulate the parts, injected into the fistulas pipes, which should be resorted to once or twice a day. In case the contraction should

prove very tedious and incomplete, a hot wire of suitable size should be introduced into the pipe, which should not be applied to the orifice alone, but deep in the track, lest premature closure of the external parts follows its application. It should not be repeated very frequently, but at long intervals. It is the object of the surgeon in the use of the wire to obtain the benefit of the healing process which is expected to follow remotely on the burn; not the destructive and inflammatory effects which are its primary results. Should sinuses communicate with the fistula, we are recommended by the standard authorities to lay them open with the bistoury. This is not absolutely necessary in ordinary cases, but opens a way for the application of lint or other local dressings which can be more conveniently applied than if the pipes were not laid open. In cases long neglected, in which the urine has principally, if not entirely, passed by the perineum, the urethra anterior to the internal opening contracts gradually, and may be found, as is frequently the case, almost obliterated. In such cases dilatation is effected, if at all, with difficulty. It is such cases, especially, that renders an operation by perineal incision indispensably necessary.

Sometimes urinous abscess opens into the rectum direct, in place of the perineum; then we have fistula formed in the bowel. In such cases, urine passes by the rectum, and air or even feces may escape by the urethra, reversing the natural order of things. Treatment is essentially the same as in the more common varieties, with this addition, that the speculum ani becomes an instrument of indispensable necessity in the manipulations about the anus.

W.

WALTZER'S OPERATION FOR THE RADICAL REDUCTION OF HERNIA: This operation was successfully performed on the 9th of March last, on a patient in the Commercial Hospital, by PROF. GEO. C. BLACKMAN. The instrument was kept applied for six days, with but little suffering to the patient, and Dr. B. satisfied himself three weeks after the operation that the canal was completely closed.—*Western Lancet*, April, 1857.

[From the American Journal.]

ON DYSENTERY AND ITS TREATMENT.

BY HENRY TIEDEMANN, M. D.

In the publication of this essay the leading object of this author, as set forth in the preface, is to make known to the profession his method of treating dysentery, with the view of bringing it into more general use.

In furtherance of this object, Dr. Tiedemann introduces his therapeutical directions, with some very interesting general remarks on the pathology of dysentery.

He maintains that the inflammation of the lower portion of the intestinal canal, in which it is now almost universally admitted that the disease essentially consists, commences invariably by a hyperæmic, inflamed and infiltrated condition of the submucous intestinal tissue, the inflammation of the proper mucous membrane, when it occurs, being the result, always, of an extension to it of the disease previously existing in the subjacent areolar structure. To this latter he refers the tenesmus and frequent discharges of a purely mucous character which constitute the prominent and almost characteristic phenomena of dysentery, especially in its early stage. As soon as the discharges become mixed or stained with blood, it is an indication, he remarks, that the inflammation is no longer confined to the submucous, but has extended to the mucous tissue itself.

Although Dr. T. is probably correct in locating the hyperæmia and inflammation, in the early stage of most cases of simple dysentery, in the submucous areolar structure, yet, as in many endemics the discharges from the very onset of the attack consist either almost exclusively of blood, or of mucous more or less mixed with blood, it is evident that from the first the mucous, as well as the submucous tissue, may be simultaneously inflamed.

The hyperæmia of the capillary system of the rectum, constituting the first stage of dysentery, Dr. T. refers to a repletion of the large veins of the liver, and consequent disturbance of the circulation through them.

“The interruption of the venous circulation in the liver, with otherwise healthy individuals, during summer, “is caused,” he remarks, “by increased venosity. In this season all the tissues

of the body, and in some measure all the organs expand, consequently also the liver. This expansion of the liver is not only owing to the higher temperature, but also to the slower circulation of the blood in its overcharged veins. The disturbed circulation of the veins of the liver must necessarily cause a disturbance of circulation in all the veins of the abdomen which will extend to the capillary vessels, and under circumstances favorable to the disease may generate the hyperæmia as a precursor of dysentery."

The principal exciting cause of dysentery, according to Dr. T., is cold, with its influence upon the tissues and organs.

"The influence," he remarks, "of sudden cold upon the liver must be the contraction of its tissues; the effect of this contraction, very often, is only the frequent *status biliosus*, an overflowing of bile into the duodenum and the stomach; in a measure, the bile, by the contraction of the liver, is pressed out of the tissues of the liver. This *stat. bilios.*, a frequent attendant on dysentery, indicates the propriety of administering emetics, which are not applicable in all cases of dysentery. But the contraction of the liver and of its vessels also affects the circulation of the blood in the abdominal veins, even to the capillaries, and must produce the most injurious effect in that part of the intestines which is most remote from the liver. This part is the rectum, in which, on account of its almost perpendicular position in the cavity of the pelvis, the return of the blood is more difficult and favors the development of hyperæmia to a still greater extent. This hyperæmia first produces a narrowing of the intestinal canal, and consequently the sensation of pressure and fullness, as if the rectum were overcharged with feces. This erroneous impression, by reflex action, causes an increased urging to stool. Next, the submucous tissue becomes infiltrated and tumid, and the mucous membrane is excited to an increased secretion. This infiltration presses the mucous membrane of the duct closely together, the passage is entirely closed, and *tenesmus*, the *first characteristic symptom of dysentery*, is the result. A general febrile reaction, gastricism, and other minor or more important symptoms ensue.

"The further extent of dysentery from the rectum into the higher parts of the intestinal canal, depends upon the mechanical progress of the hyperæmia into the capillaries, and the infiltration

into the submucous tissue, and it is explained by the arrangement of the veins in the duplicatures of the peritoneum.

“During the further course of dysentery, the mucous membrane must necessarily become involved in the morbid process; the deep transverse folds of the mucous membrane, embedded in the submucous tissue, are always first affected.” “As long as the mucous membrane is not involved in the disease we find the peculiar dysenteric evacuations which form the *second characteristic symptom of dysentery*. When the mucous membrane becomes involved in the process of the disease, it soon shows its morbid action by the admixture of blood, generally of a light color.

“The further course of the disease is in proportion to the progress of the inflammation of the submucous tissue and the mucous membrane, the formation of ulcers with undermining passages in the submucous tissue, croup-like secretions, etc. Pus and ichor are poured out, and not unfrequently typhoid phenomena appear as an effect of the resorption of these secretions, but not as constituting a separate species of dysentery.”

In its general outlines the pathology of dysentery as laid down by Dr. T. is perhaps correct. We must protest, however, against the purely mechanical explanation which he has given of the manner in which the lesions of function and structure are induced by the operation of the action of the predisposing and exciting causes of the disease.

That after long-continued exposure to intense heat, especially when combined with an impure state of atmosphere, the sudden exposure to even a moderately cold temperature, is capable of giving rise to hyperæmia of the lower portion of the intestinal mucous membrane, and a consequent disturbance of the normal functions of those parts, so as to endanger the occurrence of profuse diarrhœa, or even of cholera morbus, is unquestionably true; under particular circumstances the hyperæmia may also pass over into inflammation and give rise to dysentery, is likewise granted; but we cannot conceive of these series of morbid phenomena being brought about by a dilation of vessels or organs from the effects of heat, succeeded by a contraction, from subsequent exposure to cold of the same organs.

Dr. Tiedemann denies that dysentery is a malarious disease, or

has any affinity to intermitting fever, though it will often be found to prevail in the same localities with the latter. "It generally makes its appearance," he remarks, "when, after a long continuance of hot and dry weather, the atmosphere becomes suddenly wet and cold. It is an endemic in such portions of the tropics as have, from the influence of the sea-breezes, the nights much cooler than the day." All this is certainly correct; dysentery, nevertheless, is known occasionally to prevail as an unquestionable epidemic, and in sections of country in which it is otherwise seldom met with; it is, therefore, very evident that there are certain unappreciable morbid conditions of the atmosphere capable of giving rise to it, independent of a mere change in its temperature and hygrometric condition, although to these latter its production is referable in the majority of instances.

"I know only of two symptoms which are characteristic of dysentery, and which always suffice to recognize the disease. *The first is tenesmus, the second the evacuations.* These symptoms must occur together to establish a case of dysentery. Tenesmus, without the characteristic evacuations, constitutes no more dysentery than the characteristic evacuation without tenesmus would entitle the disease to be called dysentery. In the different stages of the disease the tenesmus also assumes a different character; thus—

"*In the first stage*, it is seldom intermittent, nor even in the mild cases; it is only more bearable. In the more violent, as well extensive as intensive cases, the tenesmus is exciting in the highest degree, and truly torturing, and the discharge of inodorous mucous, mixed with white spheroid granules, with or without blood, gives no relief. As soon as the tenesmus becomes distinctly intermittent, the disease is either on the decline, or it has entered on the

"*Second stage.* The tenesmus is now accompanied by a high state of anxiety, not by excitement as in the first stage. Every evacuation is followed by great exhaustion and violent burning in the rectum, from the anus upwards, whilst tenesmus comes and goes with distinct intermissions.

"*In the third stage* the intermissions are of longer duration; the tenesmus is preceded by greater anxiety, and the evac-

nations by prostration, even to fainting. The burning sensation in the anus and rectum diminishes.

"These three stages do not always appear in this pure and decided form, as the three stages are sometimes or generally found in different parts of the intestines.

"The symptoms of tenesmus are explained by the anatomical results of the three stages.

"*In the 1st stage* inflammation and a spongy condition of the submucous tissue. *Discharge*: mucous, with or without blood, and occasionally with balls of scybalæ.

"*In the 2d stage*, decided sympathy of the mucous membrane and commencement of ulceration. *Discharge*: shreds of the lining membrane of the intestines; brownish mucous, more liquid, and colored with blood, rarely mixed with pure blood.

"*In the 3d stage*, extension and deep ulceration of the mucous membrane and undermining ulceration of the submucous tissue. *Discharge*: blood mixed with pus, shreds of necrotic cellular tissue, and ichor.

"The evacuations, however, do not always correspond with that described in each of the three stages; and not unfrequently we find, in one evacuation, the discharges belonging to two or three stages at the same time; as all the stages can exist at once in different portions of the diseased intestines.

"Tenesmus is caused by the infiltration of the submucous tissue, which, by its swelling, mechanically narrows the passage of the intestines. In the beginning of the disease this swelling causes irritation and contraction of the muscular tissue, whereby the intestinal tube is further narrowed, so that, in the progress of the disease, paralysis of the muscular tissue of the intestines, principally of the rectum, may supervene. The infiltration of the submucous tissue, which appears in mammillated (hump like) protuberances on the mucous membrane, mostly in the direction of the transverse folds, causes the parietes of the intestinal tube to swell in such a manner against one another that they come into the closest contact, and that the passage is completely shut up. This closely compressed mucous membrane causes great urgency to evacuate, as if the rectum were filled with feces, which by contraction—a real reflex motion—it were striving to remove. The consequence of these efforts are tenesmus and the peculiar dysenteric evacuations."

Dr. T., in his account of the production of tenesmus, seems to have entirely lost sight of the increased irritability of the mucous tissue of the inflamed intestine, which would appear to us to have as much to do with the production of these as the cause pointed out above.

“The prolapsus of the mucous membrane of the rectum,” Dr. T. observes, “or of a part of the entire rectum, is said to be occasioned by violent contractions of the muscular tissue of the rectum, also by too violent contraction of the sphincter. The contraction of the muscular tissue can only produce prolapsus when there is at the same time relaxation of the sphincter, the violent contraction of these muscles must, of course, prevent prolapsus. Prolapsus recti, however, seldom occurs in the commencement of this disease, and only when the patient is weakly, and the inflammatory irritation of the muscular tissue of the intestines passes rapidly over into paralysis, which is communicated to the sphincter. In very violent or badly treated cases, with persons who are not otherwise weakly, an early paralysis of the muscular tissue of the intestines, and of the sphincter, may cause prolapsus recti, a symptom which always indicates danger. Generally, however, the prolapsus appears in a more advanced stage of the disease, when the inflammation cannot be abated, or when it changes to paralysis by the partial destruction of the muscular tissue and extends to the sphincter. This prolapsus does not unfrequently occur before death. In all cases of violent dysentery I found, on examination of the anus, which, at the beginning of the disease had been firmly closed and red, the same more or less opened, so that the tumid and highly reddened mucous membrane of the rectum could be seen. At the same time, the most violent tenesmus continued. This shows, conclusively, that the prolapsus recti is not caused by the spasmodic contraction of the sphincter.”

Having thus presented his views in relation to the pathology of dysentery, by the employment of which, during the last six years, he has succeeded in curing upwards of three hundred cases of dysentery, not a single death from the disease occurring in his practice during that period.

“As dysentery,” he remarks, “in the first two stages, is a hyperæmia of the capillaries of the rectum and colon, and seldom

of other parts of the intestinal tube, induced by the disturbed hepatic venous circulation, followed by infiltration and inflammation of the submucous tissue, which in the further progress is communicated to the mucous membrane and changes to ulceration, it distinctly indicates in these two first stages a general and local antiphlogistic treatment.

"The *internal* remedy which I have almost exclusively prescribed, and frequently with surprising success, is *nitrate of potassium*, (*kal. nitr.*) I have given it in large doses, which agree perfectly well with the patient. *Locally*, I have ordered, immediately after each evacuation, no matter how often they occurred, *injections of pure cold water*. (In very severe cases, particularly in warm weather, he has ordered injections of ice water with the best effects). As diet, I ordered milk, gruel, barley, rice-water, toast and water, pure water, and buttermilk as much as the patient likes to take.

"The nitrate of potassium and the injections I continued until the tenesmus had ceased, which in the majority of cases happened in from six to twelve hours. As the tenesmus diminished the mucous and bloody evacuations also diminished, and when it ceased, they generally disappeared entirely.

"Before I order the nitre, I consider the state of the digestive organs; which either require an emetic or purgative, or are in such a condition that nitre can be immediately given. If during the treatment with nitre and injections of cold water evacuations of fecal matter do not occur, at least once in twelve hours, which usually is the case, I recommend a corresponding dose of castor oil."

Under all circumstances, and in every case of dysentery, whether sporadic, endemic or epidemic, whatever may be the age, sex or constitution of the patient, Dr. T. has found the above treatment applicable.

When the dysenteric symptoms, with all symptoms of fever, are subdued, the evacuations having become natural, which he has often found to occur within twelve hours, Dr. T. gives a solution of sulphate of quinine, and on the third day frequently allows a better diet; after each evacuation he directs an injection of cold water for a few days longer. If regular evacuations do not occur he orders occasional doses of castor oil.

In the first two stages of dysentery Dr. T. denounces all other remedies as useless, if not mischievous. In only two severe cases occurring in sensitive females, was he obliged to administer narcotics. When the skin is inactive he gives the nitre dissolved in an infusion of ipecacuanha, with the addition sometimes of camphor-water.

“Under this treatment,” Dr. T. remarks, “when I was called in time, the disease seldom reached the second stage, never the third; the patient recovered very fast, probably because the disease was not of long duration. I have had but few cases where it lasted longer than seven days; only one lady was ill to the fourteenth day, although the dysenteric symptoms had ceased on the seventh day; she was pregnant on the second month, but did not miscarry. Most cases had already changed so favorably on the third day, all the dysenteric symptoms having ceased, that no more medicine was required, and I could leave the patient, merely ordering a proper diet for a short time to come.”

When the disease has been allowed to run on to the third stage, with a continuance of the injections of cold water, D. T. directs quinine, tannin, acetate of lead, etc., generally with opium, accordingly as the case seemed to require the one or the other remedy; with daily doses of castor oil, to promote the necessary evacuations, and in time a nourishing diet.

Of the treatment of dysentery, in its early stages, exclusively by nitre and injections of cold water we have no experience. The professional standing of Dr. T. is such, however, as to press it strongly upon our attention. We have prescribed the nitre, occasionally, in conjunction with opium and ipecacuanha, and we are persuaded with the best effects. We cannot agree with Dr. T. in his denunciation of opium as positively mischievous in the early stages of dysentery. We are in the constant habit of giving it from the very onset of the disease, and always with the very best effects. To derive from it the good it is calculated to produce in this disease, it must, however, be given in large doses. The effect of small and frequently repeated doses is rather mischievous than beneficial. Although we have generally found sporadic dysentery a troublesome and obstinate rather than a fatal disease, we have certainly not been quite so successful in its treatment as Dr. T. In a few cases, occurring in

very young, or in diseased and broken down constitutions, the disease has terminated fatally. We very much doubt whether in these cases the termination would have been different had we subjected them to the treatment laid down in the essay before us.

D. F. C.

CANCER AND ITS CURE BY DR. FELL.

It may not be considered inappropriate or out of place to note, at this time, the agents used by Dr. Fell in the treatment of this formidable malady, cancer, since so much has been said of him and his success in the medical periodicals of London. And with a view to place before the reader the facts connected with his career since he has taken up his residence in the "fast anchored Isle," we take the liberty of transcribing a portion of a short but pointed article which appeared in the July No. of the Boston Medical and Surgical Journal, appertaining to the question at issue. "It seems," says the Journal, "that a Dr. J. Weldon Fell, of the University of New York, within a year or two acquired considerable notoriety in London as a curer of cancer by a secret method. His fame coming to the ears of the Board of Governors of the Middlesex Hospital they invited Dr. Fell, with the concurrence of the surgeons of the Hospital, and in compliance with the desire of the benevolent founders of the cancer establishment of the Middlesex Hospital, to make a trial of his method upon the patients affected with cancer in that institution. The terms were that Dr. Fell should, in confidence, communicate to the surgical staff the nature of the remedies used by him and the mode of employing them, and that he should publish full particulars of the same within a period of six months, the surgeons reserving the right to do so themselves in case of failure on the part of Dr. Fell to comply with this condition. We would here remark that although Dr. Fell boasts that his consulting rooms have been open every Tuesday to the medical profession for the purpose of exhibiting his method of treatment, the remedies employed were carefully concealed; even a hospital analysis"—we quote his own words, says the writer—"failed to detect the vegetable portion of them."

"It is but justice to Dr. Fell," says the same "writer, to say that the surgical staff of the Middlesex Hospital, in a report upon the result of his treatment made March 18, 1857," speak favorably of his method, "although they regret the limited period since the treatment in the Hospital was commenced (January 22d), prevent their coming to any positive conclusion upon certain points of great importance." They say that Dr. Fell's treatment is safe and easy of application; that it is confined to the enucleation of the tumor merely; that the patients are not confined to the bed but can go abroad during the process; that the enucleation of the diseased mass is followed by a healthy granulating cicatrizing surface; and although always painful and sometimes severely so, the suffering is less than that which accompanies the action of caustic, as ordinarily employed; but that "they have not as yet had time to ascertain the average duration of the benefit conferred by the treatment, nor have they any means of knowing whether, in the event of a return of the disease, there be any difference observable from what is known to take place after excision."

In compliance with the compact entered into Dr. Fell has given to the public in a published octavo, entitled "A Treatise on Cancer," his method and the agents used. In the preface he assigns as his reasons for previously withholding his secret from the public that, 1st. Any book or paper written by a stranger, whatever information it might contain, is almost sure to be passed over with neglect. 2d. Unless the mode of preparing and applying the remedies is well understood they might be applied in cases where they would have no beneficial effect, and thereby bring them into disrepute. 3d. It often happens that when a remedy or mode of treatment of importance has been introduced by one unknown to the profession it has been adopted by some leading man, and in many cases the originator is entirely lost sight of." These are Dr. Fell's reasons for keeping his mode and agents a secret. "The second reason," says our friend of the Journal, "is so entirely quackish that we cannot help thinking it was suggested to Dr. Fell by a New York empiric in the ophthalmic line who was largely indebted to it for his extensive and lucrative practice. The treatment employed by Dr. Fell consists in the application of an escharotic, the essential in-

gredient of which is the common blood-root (*sanguinaria canadensis*), which is stated to exercise specific effect on cancer, not only destroying the tumor but overcoming the cancerous diathesis so as to prevent a return of the disease. Dr. Fell introduces this plant to the British public with a great deal of flourish, pretending to have derived his knowledge of its virtues from Indian traders, who told him that it was successfully employed for the treatment of cancer by the natives on the shores of Lake Superior. "This extraordinary plant," he says, "although unknown to civilized man as a remedy for cancer, has long been known as a powerful emmenagogue alterative, and as such has been admitted into the Pharmacopœia of the United States; and it is a question well worth consideration to ascertain how far its connection and power over the uterine functions has to do with the influences in destroying the peculiar cancerous diathesis existing in most cases." Nothing is said by Wood and Bache about its possessing emmenagogue properties, and our readers need not be told that the plant is only used internally as a powerful emetic and expectorant; externally it is a mild escharotic, and even if it did possess a special influence over the womb the idea of this property having any thing to do with its "influence" in destroying the cancerous diathesis is simply ridiculous.

The powdered blood-root is mixed with chloride of zinc, in the proportions varying from half an ounce to two ounces of the latter, made into a paste with two ounces of water and a sufficient quantity of flour. The skin over the tumor is first destroyed by nitric acid and the paste is then applied, spread upon linen. An eschar is thus created into which incisions are made, half an inch apart, avoiding the living tissues. The paste, spread upon strips of cotton, is inserted into these furrows daily, by which the action of the caustic penetrates through all parts of the tumor. This method Dr. Fell claims to be original with himself. An ointment containing the same ingredients is also used, and another of iodide of lead. The *sanguinaria* is at the same time given internally in half grain doses, either alone or combined with the sixteenth or twentieth of a grain of the iodide of arsenic, and one grain of the extract of *cicuta* in pill, or in decoction with the fluid extract of *taraxacum*.

With regard to this mode of treatment, we have to remark that the author almost invariably combines what is peculiar to it with other well known remedies. If the sanguinaria is to be employed as an escharotic, it is used with the chloride of zinc, long known as the best caustic in this disease when given internally, the patient also takes the iodide of arsenic, cicuta or taraxacum at the same time. Hence it is impossible to say how far the immediate effects of the treatment are owing to the blood-root, or to the adjuvants employed, which are well known to possess a certain amount of efficacy in this disease.

The advantages claimed by Dr. Fell for his method are, 1st, That it removes the local disease, and, 2d, That it destroys more or less completely the diathesis upon which the local manifestation depends. He says that out of every ten cases treated by him, in only about three does the disease return, whereas the results hitherto obtained have been from eight to eight and a fraction relapses out of every ten cases. With regard to the local effect of Dr. Fell's treatment there seems to be no doubt. The testimony of the surgeons of the Middlesex Hospital is conclusive on this point; the diseased mass is often enucleated, and a healthy looking cicatrix is left. We presume that no one will consider this as any thing remarkable. It has often been done before with caustic, and there is nothing in Dr. Fell's book which proves that the addition of blood-root to the chloride of zinc essentially modifies the effect of that escharotic. If a healthy-looking cicatrix were the main result to be obtained, it could be effected with much more ease by the knife. As to the efficacy of the sanguinaria in modifying or extinguishing the diathesis upon which the local disease depends, that is a point which can only be settled by careful observation for a considerable length of time. It will not do to take Dr. Fell's assertions for granted. Were he high medical authority his word would go for little in such a question, if unsupported by facts; but when a practitioner who notoriously violates one of the highest laws of medical ethics by employing a secret remedy, asserts that he can destroy or greatly modify the cancerous diathesis, we are not only compelled to withhold our belief until the fact be demonstrated, but, on the principle of *falsus in uno falsus in omnibus*, we are led to believe that such an improbable statement is

a downright attempt at imposition. Now it is a remarkable fact, that upwards of twenty cases treated by Dr. Fell which are appended to his work, but two were patients in the Middlesex Hospital. Of these, the first after three months of treatment was not entirely well; the second was dismissed well, after upwards of two months of treatment. Of the remaining patients, which were all private, one continued well seventeen months after cure, two fourteen months afterwards, five one year afterwards, nine less than a year afterwards, and in one case the patient died from a return of the disease. It is true that Dr. Fell states that the first patient upon whom he tried sanguinaria is still living and well, fifteen years after the cure; but that case is only mentioned incidentally, and no details are given of it. These are all the facts which he gives to substantiate his assertions.

It may be said by those who attempt to excuse the conduct of Dr. Fell, that so far from keeping his remedy secret he has published it to the world. From his own admission, however, he had been practising this mode of treatment for the last fifteen years before he divulged the secret, and as his reasons for withholding it from the profession are wholly unsatisfactory, we are compelled to believe that he was actuated by other motives than a desire to benefit mankind in imparting it at last. The cause is exactly similar to that of the proprietors of the "Peruvian Syrup." In both instances the medicines, being well known not to possess the virtues ascribed to them, must depend upon the mystery of secrecy for their success, until the confidence of the credulous part of the public is gained, after which an assumed frankness in disclosing their composition secures the admiration of another class, equally gullable.

The value of Dr. Fell's method ought to interest every American, since one of the patients who has submitted himself to this treatment, in the hope of being cured of a tumor in the orbit of an apparently malignant nature, is the eminent sculptor Crawford, whose genius, known and appreciated throughout the civilized world, has shed so much lustre on his native land.

We need but remark in conclusion, that so long as the intelligent lend their aid in puffing into notoriety secret systems of practice and quack nostrums; cures for every ill that flesh is heir to, the medical profession can accomplish but little in the

way of reformation. Such as Dr. Fell will be ever ready to avail themselves of the favorable opportunity, and under the pretence of having something new and valuable, unknown to the profession, the credulous seize hold of it as something to be cherished while the impostors in return reap a golden harvest.

PAPAVERINE.

PROF. E. H. Stockwell, whose solicitude for the thorough development of the vegeto-organic resources of our *Mat. Medica* obtained my promise some time since to publish in some future number of this Journal an article upon the subject of *Papaverine*, and he at that time took the liberty to give a notice in the paper that such an article would appear. What is here said, therefore, is intended to be in answer to that notice. I do not, however, open the discussion upon this new article of medicine without a consciousness of the difficulty there is of giving anything in scientific form consistent with the present popular sentiment looking in the direction of the separation of a purely anodyne principle from opium, which is, indeed, what is claimed for *Papaverine*.

In the absence of a reliable anodyne our *Mat. Medica* is grossly deficient and twenty centuries of experience have proven that opium and (latterly) its products or salts are incomparably the most powerful and indeed the only reliable anodyne we have. It is not, therefore, a mere incident that so many labors have been made to obviate the objections which obtain against opium and all its preparations heretofore in use, but it involves a necessity—we *must* have a pure anodyne. The definite quality of the narcotic and other objectionable effects of opium, and the fact that these effects are not by any means constant in their *degree of development* as proportioned to the *anodyne* effect, are certainly reasonable grounds to justify the conviction that these respective properties are dependent upon different organic principles.

It is only the failures, therefore, which have occurred in separating them that has confirmed the opinion of the unity in principle of the anodyne, narcotic and tetanic powers of opium, and

which has given rise to the indiscriminate classification in standard authorities of the narcotics and anodynes.

Before proceeding further in discussing the subject, it may be proper to look briefly at the chemical history of opium.

As early as A. D. 1803, M. Derosne discovered a chrystalizable principle (narcotina) in opium and supposed that it contained the active properties of the gum. In the following year Serturmer and Suguin discovered another (morphia), and their discovery was announced in a German paper, but without eliciting any attention at that time. In 1817 Serturmer brought out such facts in regard to the analysis of opium as led to the discovery of various new principles which, with the above, were all found to form salts with acids. Since that period other great names have been associated with the researches upon opium, among which were Robiquet, Pelletier, Berzelius and Liebig.

The organic and chemical constituents of opium as now found are the following: 1. Morphia; 2. Narcotina; 3. Thebaina (Paramorphia); 4. Codeia; 5. Narcein; 6. Meconin; 7. Bassorin; 8. Extractive; 9. Gum; 10. Resin; 11. Fixed Oil; 12. an Essential Oil; 13. Lignin; 14. Sulphuric Acid; 15. Meconic Acid; 16. Acetic Acid; 17. a substance analogous to Caoutchouc; 18. Lime; 19. Potash; 20. Alumina; 21. Iron.

Of these, however, the first four alone demand attention in this connection.

1. MORPHIA.—N. C_{35} . H_{20} O_6 —Eq. 293·8

ANALYSIS.

Carbon,	-	-	-	-	32.351
Hydrogen,	-	-	-	-	6.844
Nitrogen,	-	-	-	-	18.734
Oxygen,	-	-	-	-	42.021, Liebig.

This, though by no means a simple or pure principle, occurs in hard, transparent, brilliant chrystals of the rhombic prismatic form. It is very soluble in alcohol but sparingly so in ether or water. It is of a strongly alkaline reaction and is capable of neutralizing the strongest acid, as sulphuric and muriatic, forming with them salts, as sulphate and muriate of morphia. As was said of the basic principle morphia, so it must be remarked of these salts also, they are not pure but are compound and all admit of quite a number of products by analytical processes and recomposition, among which are theobinic and narcotinic acids.

Morphia thus in its compound state, as must be expected, evinces in its action quite a variety of therapeutic and toxicological properties, but it is certainly milder or more simply anodyne than the crude opium.

2. NARCOTINA.—N. $C_{46} H_{22} N_{13}$ —Eqs. 418. This, like morphia, is also a compound substance but occurs in similar chrysaline prismatic form. The prisms are also of a rhombic form but are larger than those of morphia.

According to Liebig and others when narcotina is acted upon by peroxide of magnese, sulphuric acid and bichloride of platinum quite a variety of new products appear, showing the compound character of this substance. Some of these products may be here named:

1. *Opianic Acid*.— $C_{10} H_9 O_{10}$; is chrysalizable.
2. *Opiammon*.— $C_{40} H_{17} NO_{16}$; a pale yellow powder.
3. *Xanthopenic Acid*.—A yellow flocculent precipitate resulting from opiammon when acted on by alkalies.
4. *Opiano-Sulphurous Acid*.— $C_{20} H_8 O_{11} S_2, HO$. This is produced by the mutual action of sulphuric and opianic acid; is chrysalizable.
5. *Sulphopianic Acid*.—Formed by the action of sulphuretted hydrogen on opianic acid.
6. *Himipinic Acid*.— $C_{10} H_4 O_5, HO$.
7. *Cotarnine*.— $C_{25} H_{13} NO_6$.
8. *Humopinic Acid*.
9. *Apophyllic Acid*.
10. *Narcogenine*.
11. *Narcotinic Acid*.

There has been some difference of opinion as to the effects of Narcotina upon the system. Some have stated it to be of but feeble power, while others, among which is Megendie, have pronounced it possessed of great activity. The effects ascribed to it are those of a purely narcotic agency. Megendie says that in the quantity of a single grain it has caused the death of a dog. The symptoms marking its power are stupor, coma, dilatation of the pupils and extreme prostration.

3. THEBAINA.— $NC_{25} H_{14} O_3$ —Eq. 203.4. It occurs like the other bases, morphia and narcotina, in rhombic prisms, but which are shorter and lack the bitter taste common to them. Its

chemical reactions are very like those of narcotina. It is very soluble in alcohol and ether, but insoluble in water and alkaline solutions. Thebaina, in its action on the animal body, resembles somewhat that of strychnine. Megendie states that it operates similar to brucine and strychnine, which are the active principles of nux vomica. We have here a solution of the question involving the tetanic or convulsive and spasmodic action of opium on some individuals and especially as observed in its effects upon children.

4. CODEIA.—N. C_{35} , H_{20} , O_5 .—Eq. 285.8. This principle occurs also in colorless prismatic crystals; soluble in water, alcohol and ether, but not in alkaline solutions. Christison considered this substance capable of producing decided effects which resemble those of strychnine, but most observers regard it as a very feeble agency.

So much then for the chemical history of opium. And now it is pertinent to the arguments to be set forth on the subject of papaverine to state again what has before been asserted, that this article is claimed to be an organic principle of opium, possessing its anodyne properties, and which is free from the narcotic and tetanic.

If the limits of this communication would admit it would be desirable and much more satisfactory to give the chemical details of the preparation of the papervine, but as it is, the principles on which the process is conducted can alone be admissible. A reference to the articles in the chemical history of opium above, which history is here given mostly for this purpose, will show these principles by a comparison of the noted effects that follow their exhibition and also those of opium itself, as modified by different combinations with chemical agents.

1. The commercial morphine, which is a triple salt of morphia (papaverine), thebaina and narcotina, but having quite a preponderancy of the first, and these principles being all in chemical union with one of the stronger mineral acids, is very much milder in its effects than opium; that is, it is more purely anodyne.

2. Experiments with the different preparations of opium show that all processes tending to remove the narcotina and thebaina improve the symptoms attending the effects of these preparations.

3. Opium itself is modified in its narcotic and tetanic effects by such chemical influences as change the chemical state of the nar-

cotina and thebaina in such a way as to render them less free or subject to the solvent powers of the fluids of the system.

Sulphuric ether will remove the thebaina and narcotina from an aqueous solution of opium to a large extent. The stronger alkalies form much more persistent combinations with thebaina than with the purely anodyne principle of opium.

Now assuming that the anodyne, narcotic and tetanic properties are in every sense distinct—that is that they are found in three distinct principles in the plant from which they are obtained ; that these principles have distinct chemical characteristics, and respectively evince their special peculiarities in their physiological and therapeutical effects ; it follows not only that they may be *separated* from each other, but that the demands of therapeutics and pharmacy must ever dictate the adoption of a classification and preparation of these articles in their separate state.

Papaverine is the anodyne principle of opium freed from the narcotic and tetanic properties by chemical processes, the practicability of which has now been indicated. This anodyne principle exists in full power in the commercial morphene as was stated before, but it is so encumbered in that compound salt as not to be eligible for common use. A new form of its appearance therefore becomes necessary, although a new name might have been avoided in retaining that of *morphine*, attached to the anodyne power in its separate state. But it was thought that since this term has been employed so long in commerce and in medical practice as indicating the triple salt, and that without the least discrimination as to the compound character of the article, or the peculiar properties of the constituents, it would be entirely a better plan to adopt a new name ; hence that of *Papaverine*, from the Latin name of the plant from which the medicine is obtained ; and the name is intended to indicate the active anodyne principle of opium in an isolated form.

The papaverine, possessing all the anodyne properties of opium, freed from the narcotic and tetanic, is by far the most desirable preparation which is now made from opium, since it will fulfill all the true indications which have directed the use of that article. It is anodyne, diaphoretic, stimulant, expectorant and anti-spasmodic in the highest degree. It operates without exhausting the nervous power or disturbing any of the physiological functions.

J. KOST.

AN EXTRAORDINARY CASE.

BY R. RICHARD CLAY, M. D.



The above is a correct representation of a remarkable case of spinal curvature. Leonard Tresk, the unfortunate victim of this disease, is a resident of Peru, Me. His age is 52; and the commencement of his disease dates as far back as the year 1833, having been thrown from a horse about that time, "receiving the full force of the fall upon his neck and shoulders."

It is said that about the year 1840 a separation of some of the cervical, and some of the dorsal, *vertebrae* suddenly took place, the unfortunate man falling prostrate to the floor, and unable to move for nearly two hours; the head became dizzy; partial loss of vision ensued, with numbness of the *cerebrum*.

Mr. T. originally stood six feet one inch in his boots. He now measures, when standing, from the top of his head to the promontory of the *secrum*, (following the course of the spinal column), thirty-nine inches; from the third dorsal *vertebra* to the *symplisis pubis*, eighteen inches; from the nose to the *symplisis pubis*, seven inches; from the *clavicle* to the sole of the foot, fifty-three inches; and from the top of the head to the sole of the foot, forty-eight inches.

There is complete anchylasis of the neck, with the exception of a single movement when the odontoid process of the *axis* articulates with the *atlas*.

There is also constant heat and pain in the top of the head. The stomach, lungs, and other organs within the thoracic and abdominal cavities are quite healthy. The curvature continues to increase, and already interferes with the act of deglutition, and must eventually prove fatal.

Mr. T. has been under the treatment of more than twenty physicians, without obtaining any benefit. He is now confined to the house, but goes miles from home, attended by a friend.

I did not intend, in this article, to speak of the nature, causes or treatment of disease of the spine; but simply to present, for the consideration of the readers of the Journal, this wonderful living specimen of humanity.

INDIANA STATE ECLECTIC MEDICAL ASSOCIATION MEETING.

A MEETING of Eclectic Physicians of the State of Indiana met at Indianapolis, June 30, 1857—as per previous call, for the purpose of organizing a State Medical Association. On motion Dr. W. H. Kendrick was called to the chair and O. H. Kendrick was appointed Secretary. After a few preliminary remarks from the chair explanatory of the object of the meeting, the following resolutions, by Dr. G. D. Gibbs, of New Albany, were adopted:

Resolved, That this Association shall be known by the name of the Eclectic Medical Association of Indiana.

On motion of Dr. Merrill, of Indianapolis :

Resolved, That the permanent officers of this Association shall be one President, two Vice-Presidents, one Recording Secretary, one Corresponding Secretary, and one Treasurer.

On motion, the following gentlemen were elected permanent officers for the ensuing year, viz: W. H. Kendrick, President; G. L. Gibbs and J. W. Young, Vice-Presidents; O. H. Kendrick, Recording Secretary; J. N. Green, Corresponding Secretary; and L. Abbot, Treasurer.

On motion, the chair appointed J. F. Merrill, S. D. McCann

and J. W. Young a committee to draft a constitution and rules of order to be presented at the next meeting.

Resolved, That the proceedings of this meeting, with the names of the members present, be sent to the *AMERICAN MEDICAL JOURNAL*, *College Journal*, *Eclectic Medical Journal*, and *Physio-Medical Recorder* for publication.

Resolved, That this Convention extend a cordial invitation to each Faculty of the different Reform Schools of Medicine at Cincinnati to meet with us at our next regular meeting.

Resolved, That the thanks of this Convention be tendered to the Trustees of the Church for the use of their house during the sitting of this Convention.

Resolved, That this meeting do now adjourn to meet again during the approaching State Fair, subject to the call of the officers of the Association.

W. H. Kendrick, *President*.

O. H. Kendrick, *Secretary*.

Names of Members present:

J. W. Young, Gosport,	G. L. Gibbs, New Albany,
S. D. McCann, Greenwood,	L. Abbot, Indianapolis,
D. Rollin Malone, Harrodsburg,	U. W. Mallette, Bedford,
J. H. Canada, Greensboro',	C. B. Austin, Greensboro',
J. W. Jay, Raysville,	J. F. Merrill, Indianapolis,
W. H. Kendrick, Indianapolis,	J. N. Green, "
S. M. Weaver, "	O. H. Kendrick, "
— Riddell, Franklin,	J. C. Dixon, Attica.

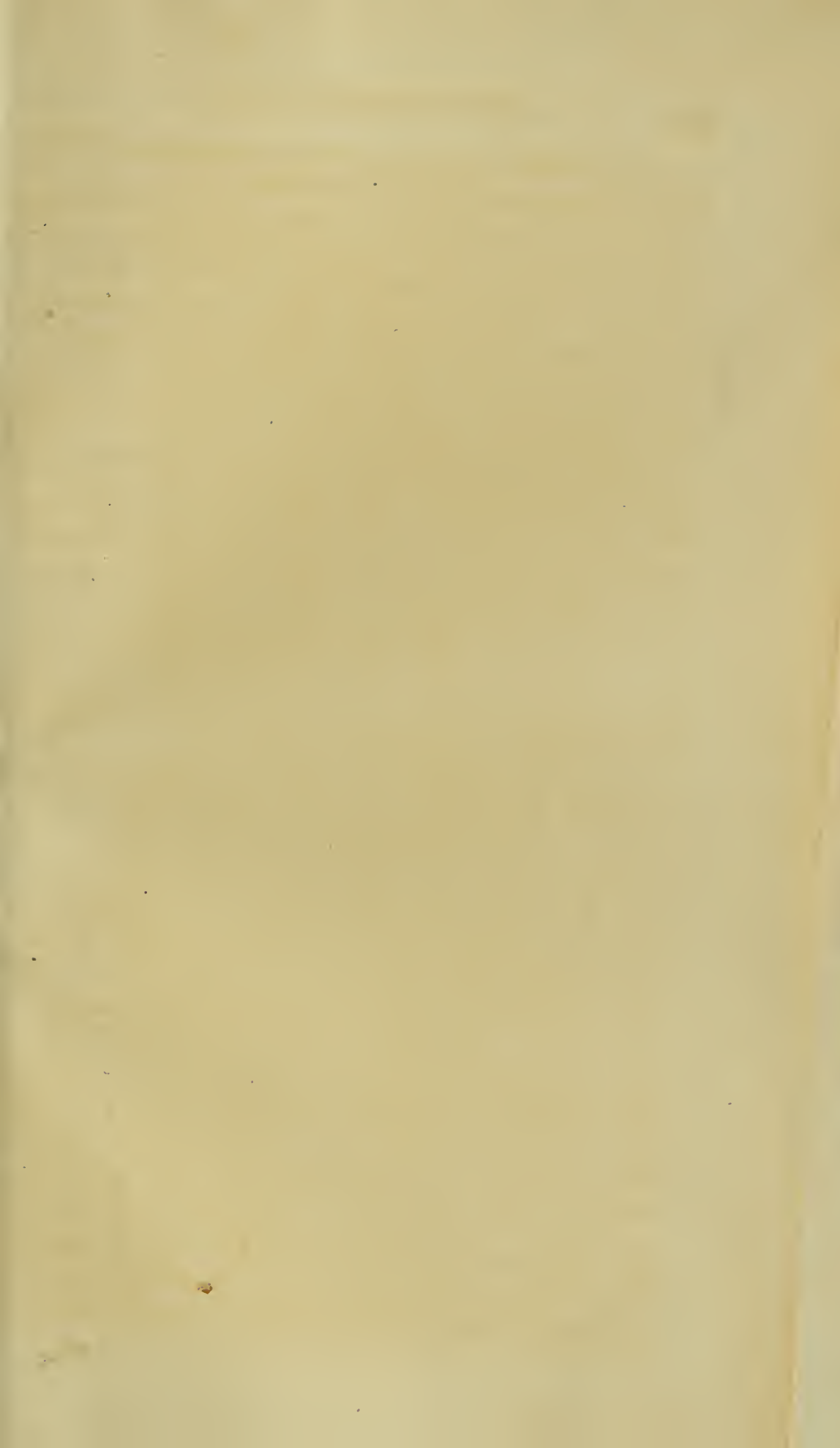
OBITUARY.

It becomes our painful duty to notice the death of Dr. F. C. Powell, late of Hamilton, Butler county, Ohio; who departed this life, at his residence, on the 16th of July, after a protracted illness of several months.

Dr. Powell was a student of the A. M. College and graduated at the spring term of 1856. Soon after, he located in Hamilton and associated himself with Prof. S. H. Patter in the practice of his profession, with whom he remained connected till a short time prior to his death.

Dr. Powell's numerous friends, spread over the country, will receive this sad intelligence with mourning and regret; that he, though scarcely arrived at the meridian of life and had but just entered upon an active, useful, professional career should have been cut down by that fell destroyer Phthisis Pulmonalis.

He leaves a young wife and an infant son, besides a wide circle of friends, to mourn his premature death.



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